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From Harappa to Hastinapura:
A study of the earliest South Asian city and civilization from the point of view of archaeology and ancient Indian literature

A thesis presented

by

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to

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From Harappa to Hastinapura: A study of the earliest South Asian city and civilization from the point of view of archaeology and ancient Indian literature

This dissertation explores the earliest South Asian city and civilization from the point of view of Sanskrit and Pāli literature and the archaeology of the Harappan and Ganges civilizations. Aimed at showing a new way of using ancient Indian texts in South Asian archaeology, it combines the methods and epistemologies of anthropological archaeology, history and philology and is based on humanistic, subjectivist, structural and reflective principles.

In the theoretical introduction, it is argued that the sociopolitical consciousness of historical agents is inseparable from the phenomena of the past; and that from the point of view of archaeology, ancient Indian literature is valuable as source of ideas rather than facts. Given this premise, excerpts from Sanskrit and Pāli texts are selected and analyzed with the goal of extracting the definitions of the city. It is established that the city was distinguished by two traits: fortifications and authority. Consequently, data on authority and fortifications from the twenty-five archaeological sites of the Harappan and Ganges Civilizations are analyzed with the purpose of determining whether the model extracted from the texts is historically accurate and whether the Harappan and Ganges Civilizations belong to the same cultural entity, i.e., the ancient Indian Civilization. After a site-by site analysis, it is concluded that indeed the earliest Harappan and Gangetic cities were epitomized by the concurrent processes of the construction of fortifications and the

formation of authority. Furthermore, fortifications performed mostly ideational functions, i.e., symbolized authority, delineated space, and marked territorially bound identities.

In conclusion, to explore the relationship between the ideas of the city and civilization, two analytical models are extracted from the Sanskrit Purāṇas. Depicting the genesis of a complex society, these models lead to a new definition of the ancient Indian civilization. According to this definition, the ethos of ancient India is formed prior to the emergence of the Harappan Civilization and is contingent on agricultural economy, orally transmitted codes, an idiosyncratic social system, and a set of ritual practices. Meanwhile, cities, writing and monumental architecture – the markers of the Urban Revolution that are often equated with markers of civilization – are epiphenomenal to the ethos of the earliest Indian civilization.

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Abbreviations

AN	Aṅguttara-Nikāya
ARASI	Annual Review of the Archaeological Survey of India
ASI	Archaeological Survey of India
BaP	Brahmāṇḍa Purāṇa
BRW	Black and Red Ware
BSW	Black Slipped Ware
HARP	Harappa Archaeological Project
IAR	Indian Archaeology: a Review
KA	Kauṭalīya Arthaśāstra
LM	Lalitāmāhātmya of the Brahmāṇḍa Purāṇa
MASI	Memoirs of the Archaeological Survey of India
MBH	Mahābhārata
MiP	Milindapañha
MP	Matsya Purāṇa
NBPW	Northern Black Polished Ware
PBW	Polished Black Ware
PGW	Painted Grey Ware
RM	Valmīki Rāmāyaṇa
SP	Structural Period
VP	Vāyu Purāṇa

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Preface

I became interested in ancient India as an undergraduate in history while living in Saint Petersburg, Russia. What amazed me at that time was the lack of communication between the scholars of philological and social orientations. Philologists scrutinized Sanskrit words and verses, while historians reconstructed the past in accordance with their dogmatic schemes. Understandably, the Soviet version of Marxist historiography prevented them at the time from innovative and creative ways of thinking.

When several years later, I moved to the United States, I thought that the interaction between philologists and social scientists of ancient South Asia would be more productive. I quickly found out that I was wrong. Although social scientists had immensely more freedom in expressing their ideas and creating new approaches, the interaction between the specialists in texts and the specialists in material culture was barely existent. Philologists still scrutinized the words and verses, while anthropologists analyzed the past in accordance with the schemes of western anthropological science. Greatly dissatisfied with this situation, I began to look for a synthetic, conjunctive, and interdisciplinary method for the study of ancient South Asia; a method that would combine the efforts of historians, anthropologists and philologists and would create a holistic, structural and interdisciplinary interpretation of the past.

Meanwhile, studying anthropological archaeology at Harvard University, I was amazed at how similar the epistemology of some scientific archaeologists in the West was when compared to the epistemology of the Soviet Marxism. Not unlike Marxists,

scientific archaeologists believed in the objectivity of the past and the intelligibility of human actions. For example, one well-known pandit of a 'purely scientific approach' compared the craft of archaeology with that of a car mechanic.

> ...one needs to know how the engine operates, in order to identify its relevant components - the carburetor, battery, cylinder, and so on - and to put them together correctly. In the same manner, archaeologists must identify each type of behavior that took place at each site they find and then begin to fit the pieces into place to make up a prehistoric system of land use (Binford 1983: 132).

On the contrary, while at Harvard I was becoming more and more fascinated with the ideas of humanistically oriented philosophers and social scientists, such as Hegel, Benedetto Croce, R. G. Collingwood, Isaiah Berlin, Mikhail Bakhtin and Heyden White. I gradually began to believe that the philosophical notion of free will, or as anthropologists would put it 'the independent decision making' rather than any other factor was the main force behind history and that the sociopolitical consciousness of historical agents was the legitimate and largely ignored source for the study of the past. This is how I arrived at the idea of subjective humanism (formulated in the first chapter of this dissertation) and at the method of using the ancient Indian texts as the sources of ideas rather than facts.

Thus, the present dissertation is designed to pursue both theoretical and empirical goals. From the theoretical point of view it is aimed at combining the efforts of philology, history, and archaeology and at finding a new way to study ancient Indian civilizations through the analysis of archaeological and textual data. From the empirical point of view, its task is to propose a new model for the conceptualization of the ancient Indian city and civilization. For the convenience of the readers, I provide here a brief summary of my argument.

The first chapter is theoretical. It has four goals: to formulate the topic, to define the method, to evaluate the relevant scholarly literature, and to outline the scope of primary sources. The topic is formulated as a study of the ancient South Asian city and civilization from the point of view of Sanskrit and Pāli literature and the archaeology of the Harappan and Ganges cultures. The method is defined as humanistic, subjective, reflective and structural. Aimed at combining the efforts of anthropology, archaeology, history and philology, it rests on four presumptions: first, that human agency is the main driving force beyond history; second, that the creation of structures and models is essential for the conceptualization of the human past; third, that there can be no purely scientific and objective interpretation of the past; and fourth, that the ideas and thoughts of historical agents present an intrinsic part of the events, phenomena, processes, structures and models of the past. In accordance with these presumptions, I propose that for historical and anthropological reconstructions of South Asian protohistory, ancient Indian texts are valuable primarily as sources of ideas rather than facts. I continue by proposing to investigate the idea of the city based on three sets of data: a sample of Sanskrit and Pāli texts which can potentially shed light on how the city was envisioned in ancient India, a sample of archaeological sites of the Ganges Civilization, and a sample of archaeological sites of the Harappan Civilization.

The second chapter deals with the idea of the city in theory and in ancient Indian literature. First, after reviewing a few major theories of the city, I conclude that as an idea, the city has been innately dual. At some point, this duality was conceptualized in theological terms as a metaphorical opposition between the City of God and the Earthen City. Today, we see it as an opposition between the city as a product of poetic

imagination and the city as an intelligible and objective whole. Consequently, I argue that both as an idea and an historical phenomenon, the city cannot have a single and universally comprehensive definition. Instead, it can be studied and conceptualized in a multitude of ways from the viewpoint of several academic disciplines. Most importantly, the city as an historical phenomenon is inseparable from the city as an idea in the minds of historical agents. Therefore, to understand the city one needs to find out how the historical agents themselves envisaged the phenomenon of the city.

Following these presumptions, I select excerpts from seven Sanskrit and Pali texts, namely the Aṅguttara-Nikāya, the Kauṭilīya Arthaśāstra, the Vālmīki Rāmāyaṇa, the Mahābhārata, the Milindapañha, the Vāyupurāṇa, and the Lalitāmāhātmya of the Brahmāṇḍapurāṇa. Since these texts stand for more than a millennium of Sanskrit and Pāli literature and represent several literary genres and ideological traditions, I assume that their analysis is likely to produce inclusive and representative results. After reviewing the relevant excerpts – abstract definitions of the city, conventional manuals of the layout of cities, and the panegyrics on divine, mythical and historical cities – I arrive at the conclusion that wittingly or unwittingly yet deeply in their minds, people responsible for the composition of these texts shared the same quintessential view of the city. According to this view, the city as an idea and an historical phenomenon was distinguished by two traits: fortifications and authority. Following my argument that as a complex sociopolitical and cultural phenomenon the city cannot have a single and universally comprehensive definition, I accept this view as a working hypothesis to be tested against the archaeological data of the Ganges Civilization.

The third chapter presents an analysis of data on fortifications and authority from thirteen archaeological sites of the Ganges Civilizations, i.e., Ahicchatra, Atranjikhera, Bhita, Hastinapura, Kausambi, Mathura, Pataliputra, Rajghat, Rajgir, Sonpur, Sonkh, Sravasti, and Vaisali. After a site-by-site analysis, I conclude that the massive fortifications that surrounded most of these sites carried symbolic rather than military or ecological functions. Moreover, they served as the main material symbols of authority; no palaces, temples, rich burials or objects of luxury were necessary for the expression, solidification and glorification of power. Given this, I argue that the construction of fortifications in the Ganges Civilization symbolized three codependent processes: the formation of territorially bound identities, the shaping of authority and the emergence of cities. This in turn shows that the view of the city by the historical agents presents a plausible model for the conceptualization of the processes that took place in the Gangetic Doab in the mid-first millennium BC. Indeed, the earliest Gangetic cities were epitomized by the emergence of authority and the construction of fortifications.

In the fourth chapter, moving back in time, I test the same model against the archaeological record of the Harappan Civilization. Site by site, I analyze data on fortifications and authority from Allahdino, Banawali, Chanhu-Daro, Dholavira, Harappa, Kalibangan, Kot-Diji, Lothal, Mohenjo-Daro, Nausharo, Surkotada, and Sutkagen-Dor. In the cases of Allahdino, Dholavira, Kalibangan, Kot-Diji, Lothal, Nausharo, Surkotada and Sutkagen-Dor, I make significant revisions in the interpretation of the existing sequences and other archaeological data. Remarkably, the conclusions that I arrive at are similar to the conclusions of the previous chapter. The most explicit and opulent expressions of authority in the Harappan Civilization are massive fortification

systems (platforms and walls), which appear to have carried primarily symbolic functions. I suggest that through variances in scale, the management of access, the implementation of segregation, and the accentuation of certain spaces, these fortification systems create three-dimensional segregated worlds, characterized by restricted access and hidden monumentality. The essence of these worlds is ideational; I propose that they are products of a unique and complex worldview focused on the structure of the universe. By creating miniature replicas of the universe, the Harappan fortification complexes mark territorially bound identities and along with authority epitomize the emergence of the first cities.

In the fifth concluding chapter, I move from the idea of the city to the idea of civilization. As a theoretical premise, I assume that the relationship between the ideas of the city and civilization is more complex than it may first seem to be, and as a goal for this chapter, I decide to explore this relationship in the context of ancient South Asia. First, I discuss several major contributions to civilizational theory and, under the influence of the ideas by Fernand Braudel, propose my own definition of civilization. I define it as a deep structure of the most complex and largest comprehensible sociocultural unit. What makes this definition different from that of Braudel's is the adherence to presumptions of subjective humanism, a method that I have proposed in the first chapter. In the context of this method, civilization is a transcendent, semi-objective and reflective category. Defining a civilization is like catching a glimpse of a murky, illusory and to a large degree imaginary structure. Most importantly however, as an idea civilization is in permanent transition, swinging between historical reality, the mind of the researcher and the mentality of historical agents. In contrast to previous researchers, I

propose to investigate the ideas of historical agents and specifically those sociopolitical and historical concepts that can alter our own views. Following these presumptions, I introduce two models extracted from the Sanskrit Purāṇas and reminiscent of the idea of civilization. The first model is expressed in the eleven traits of the Tretā Yuga, the second cosmic age in the ancient Indian story of cyclical time. This model is meant to mark a drastic cultural shift from the egalitarianism and hunting gathering to the sociocultural complexity and food-producing economy. The second model is expressed in the five quintessential traits that emerge during the Tretā Yuga and maintain importance until the end of the cycle. Based on these two models, I propose a new definition of the ancient Indian Civilization. According to this definition, the ethos of ancient India comprises four traits: agricultural economy and predominantly rural life style, a set or orally transmitted sacred and legal codes, the idiosyncratic semi-hierarchical social system based on a set of beliefs and ideological norms rather than on access to the means of production, and a set of ritual and sacrificial practices. Remarkably, in the context of this definition, the ethos of the ancient Indian Civilization is temporarily and casually linked to the agricultural revolution and is contingent on transformations in ethical, religious, ritual, social and agricultural spheres. Meanwhile, cities, writing and monumental architecture – the three traits that for a long time have been seen as the definitive markers of civilization – play secondary role and are epiphenomenal to the ethos of ancient India.

Civilization is a thing of the mind; an inquiry into the nature of civilization, then, is to ask what persons have used the word 'civilization' and what they have meant by it.

R. G. Collingwood
"The New Leviathan…". Oxford: Clarendon Press 1992 p. 80

Chapter 1. Subjective Humanism as a Method for the Study of Ancient South Asia

> Enfranchising itself from servitude to extramundane caprice and to blind natural necessity, freeing itself from transendency and from false immanence (which is in its turn transcendency), thought conceives history as the work of man, as the product of human will and intellect, and in this manner enters that form of history which we shall call *humanistic*.
>
> (Croce 1921: 94)

Introduction

South Asia witnessed two urban revolutions. The first took place in the middle of the third millennium BC and brought into existence the Harappan Civilization. The second occurred almost two thousand years later and culminated in the emergence of the Ganges Civilization. Much literature has been written on the various aspects of these two ancient civilizations. Yet, there is a striking lack of thorough holistic studies that analyze both of them from a broad comparative and interdisciplinary perspective.

In my view, this is due to several reasons. First, disciplines dealing with ancient South Asia – archaeology, history, philology and linguistics – are largely alienated from each other. Unlike in the Near East or China, archaeologists as anthropologists, archaeologists as historians, historians and philologists working in South Asia are neither well-aware of each other's work, nor have much professional interaction with each other. Second, the Harappan and Ganges Civilizations are separated from each other both

geographically and chronologically; the Ganges Civilization emerged over a thousand years after the demise of the Harappan Civilization, and with its emergence the center of political gravity in Northern South Asia shifted hundreds of kilometers to the east. Third, the issue of ethnic, cultural, sociopolitical and linguistic continuity between the Harappan and Ganges Civilizations is highly political. Recent attempts at the revision of South Asian proto-history by several leading Indian scholars show how important this issue has become to certain academic and political circles of modern India (S. P. Gupta 1996, B. B. Lal 1998, 2002c, Simha 1995). Fourth, the number of primary and secondary sources accumulated over two hundred years of scholarly interest in ancient South Asia is immense. With dozens of archaeological reports and hundreds of ancient texts, it is a challenge to formulate a synthetic yet manageable research project.

Aimed to address at least some of these issues, this dissertation explores the ideas of *the most ancient South Asian city and civilization from the point of view of the Sanskrit and Pāli literature and the archaeology of the Harappan and Ganges cultures*. Four objectives are sought in this research.

1. To redirect attention from positivist and economically deterministic models of the study of early complex societies to humanistic, subjectivist, text oriented and reflective approaches;

2. To propose a novel method for the joint use of ancient texts and material culture; and by doing so, to lay the foundation for a new and productive interdisciplinary direction in the study of ancient South Asia

3. To formulate a holistic theoretical model for the study of the Harappan and Ganges Civilizations;

4. To address the issue of cultural continuities between the proto-historic and early historic South Asia and to redefine the ethos of the ancient Indian Civilization.

Methodologically, these objectives stem from the writings of a mixed group of historians, philosophers, philologists, anthropologists and specialists in ancient South Asia. The ideas that have influenced the instigation of this dissertation the most are: Benedetto Croce's equation of history with art (Croce 1921, 1960, 1974), Mikhail Bakhtin's concept of the text (Bakhtin 1979), the holistic model of the ancient Indian Civilization by S.C. Malik (1968), the use of texts in the study of ancient India by Romila Thapar (1978, 2000a), the subjectivist and reflective historicism of R. G. Collingwood (1946), the metahistorical theory of Hayden White (1973), the notion of historical time by Fernand Braudel (1949, 1969, 1987), and the emic-etic debate between Kenneth Pike (1954) and Marvin Harris (1979). The aim of this chapter is to place the subject matter, the objectives and the intellectual roots of this dissertation into a proper theoretical and methodological perspective.

Between Archaeology, Anthropology and History

Addressing broad conceptual questions in South Asian protohistory and early history, one is inevitably forced to move beyond the boundaries of narrow disciplinary methods. The four main disciplines that study ancient South Asia are anthropology, archaeology, history and philology. The relationship between archaeology, anthropology and history has been the point of controversy.

Archaeology per se: Archaeology is like a prodigal son. Depending on the education, country of origin and academic traditions of its practitioners, it is seen as

anthropology, history, art history, classics, area studies, or as an independent discipline. Protohistoric and early historic South Asia is a good example of how different perceptions of archaeology can be. Anthropological archaeologists working in South Asia deal mostly with the cultures of the Bronze Age and display little interest in early historical periods. Their method, ideas and jargon are heavily anthropological and have little to do with historical or literary thought. On the other hand, historical archaeologists focus predominantly on the periods beginning with the middle of the first millennium BC and rarely touch upon the cultures of the Bronze Age. Their primary interests lie in the reconstruction of culture histories and they employ historical methods in their analyses.

I favor an old yet momentous distinction between 'archaeology per se' and 'archaeology as interpretation' made by Taylor in *Study of Archaeology* (Taylor 1948). 'Archaeology per se', as Taylor defined it, is "nothing but an excavation technique," "no more than a method… for the gathering of cultural information". "The archaeologist, as archaeologist," in Taylor's view, is "a technician" (Taylor 1948: 44).

Archaeology as interpretation or, as one could call it, archaeology as text is a much broader category, which is in my view coterminous with Mikhail Bakhtin's concept of the text as the essence of any scientific or intellectual activity. In Bakhtin's definition, the text is "…the primary given reality and the point for departure for any discipline in the human sciences, …the aggregate of various kinds of knowledge and methods called philology, linguistics, literary scholarship, scientific scholarship and so forth… (Bakhtin 1986: 113-114).

Archaeology as anthropology and archaeology as history: Given the broad interdisciplinary scope of archaeology as interpretation, speculating on whether

archaeology is history, anthropology or an independent discipline is not productive. All three disciplines are closely related and their relationship is contingent upon research topics. If the research is undertaken by an archaeologist whose data comes primarily from excavations, one can look at history and anthropology as methods of interpretation. On the contrary, if a historian needs archaeological data for his interpretations, he is right in looking at archaeology as an auxiliary historical discipline. In other words, the question of whether archaeology is history or anthropology is not properly formulated. In defining scholarly disciplines, one should look at the objects of their investigation rather than methodologies: the objects do not change as quickly or as easily as the methodologies do. The past in its totality is the object of archaeology, whereas history and anthropology are its methodologies. Archaeology, if one defines it through its object, is the study of the past by means of the contextualization of material remains. Therefore, the relation of archaeology to history, anthropology or any other discipline is not an issue of definition, but an issue of constantly changing methodology. For example, archaeologists working with the material from Shang China, Pharaonic Egypt or Medieval Europe have to be aware of the written documents. Archaeologists writing on Archaic North America, Iron Age Sub-Saharan Africa or the Epipaleolithic Levant cannot ignore anthropological theory. When studying bronzes in China or pottery in Archaic Greece, one must be familiar with art history. Lithic analysis and zooarchaeology require a good knowledge of statistics. All these however are just tools for the contextualization of the past. They do not define archaeology as a discipline.

Archaeology thus has a multiple identity. W. W. Taylor was right in saying that 'archaeology per se' is nothing but an excavation technique, since archaeology as

interpretation or archaeology as text is too interdisciplinary to be narrowly defined (Taylor 1948: 44). In this light, the debate on whether archaeology is history, anthropology or an independent discipline is meaningless. The multitude of scholarly disciplines, research topics, and methodologies constitute a network of constantly interchanging variables rather than a number of static entities with strictly defined boundaries. Depending on the goals of research and the self-identification of the researcher, the relationship between archaeology, history and anthropology varies.

Social anthropology and history: Another aspect of controversy is the relationship between social/cultural anthropology and history. Skimming through the writings of famous anthropologists who have in one way or another touched upon the relationship between anthropology and history, I have been struck by the realization that many of them have indeed a very vague understanding of what the academic discipline of history is about. The following quote from Claude Levi-Strauss is a lucid example of such a misconception of history.

> We must acknowledge that history has confined itself to its original modest and lucid program and that it has prospered by adhering to it closely. From the vantage point of history, problems of principle and method appear to have been definitely solved (Levi-Strauss 1963: 1).

This was written during the century of historians such as Arnold Toynbee, Oswald Spengler, Benedetto Croce, Robin Collingwood, Isaiah Berlin, Fernand Braudel, and Marc Bloch. This was also the time of several national and local historical traditions, all with distinct methodologies and remarkably different theoretical presumptions. In this conceptual mosaic, Levi-Strauss spoke of the problems and methods of history as having been "definitely solved"?! In my view, history and anthropology are kin disciplines and

their kinship is obvious from a large number of similarities. Some of these similarities are:

1. *History and anthropology have arisen from the same historico-philosophical roots*. Voltaire, Vico, Compte, Condorcet, Kant, Herder, Hegel, Marx, Durkheim and others laid the foundation of anthropology as well the foundation of history. For a long time, an impetus for the development of both disciplines was the search for the laws or structures that underlie human society. The main difference was that most historians looked for the rules and regularities in a diachronic perspective and most anthropologists in a synchronic. It is ironic that Evans-Pritchard spoke distastefully of Vico, Hegel, Marx, and Toynbee (Evans-Pritchard 1962: 122). Epistemologically, his own work is not much different from Toynbee's. Both believed in the intelligibility of society and discerned structures. Whether those structures were synchronic or diachronic did not really matter.

2. *Similar to anthropologists, many historians abandoned the idea of scientism and objected to the intelligibility of human society*. To a person familiar with the philosophy of history, postmodern relativism and the neglect of scientific objectivism do not offer anything new. Postmodernists merely revitalized the debates, which for a long time had been held among the philosophers of history. Yet in the end of the nineteenth century, Benedetto Croce opposed the positivist rhetoric of Compte by comparing historical writing with art. Soon after, Spengler wrote *The Decline of the West*, the book that would become the Bible of antipositivism in social science (Spengler 1918).

3. Levi-Strauss was profoundly wrong in assuming that the principles and method of history had been solved (Levi-Strauss 1963: 1). *Historians have debated and debate the subject and definition of history to a no less extent than anthropologists debate the*

subject and definition of anthropology. With Isaiah Berlin and Collingwood on one hand and Marxists on the other, the theory of history in the twentieth century has been drastically divided. Furthermore, historians, not anthropologists were first to raise the questions of subjectivity and relativity that have later become the household words of anthropology. Even the currently fashionable idea of reflexivity can be found in the works of historians. In late 1940s, at the time of full-blown scientism of British anthropology, Collingwood spoke of reflexivity in connection to his idea of the thought within the events (Collingwood 1946: 302-315). "Historical thinking" according to him, was "always reflection: for reflection" was "thinking about the acts of thinking" (Collingwood 1946: 307).

4. *One of the biggest misconceptions about history is that it studies the past through the interpretation of written documents.* As one distinguished American anthropologist puts it, "the "out there" for the historian is not in the heads of the natives in the field, but in what purposely or accidentally the natives have put down on paper" (Cohn 1980: 208). In my view, this view of history is profoundly erroneous. First, historians constantly have recourse to the study of sources other than written texts, i.e. numismatics, material culture, paleography, oral traditions, etc. Second, the vision of history as the study of written texts inevitably leads to the distinction between historical and a-historical societies (Gellner 1973: 4), and consequently is not just wrong but also evolutionary, ethnocentric and racist. It is no surprise that according to this vision, most of America, Africa and significant parts of Asia become 'historical' only after contact with literate cultures. In other words, people who created Chaco, Machu Pichu, Great

Zimbabwe and Jenne-Jenno had no history. In my view, this premise is absurd. Humans had history from the inception of their becoming human.

5. *The notion of the other is an important epistemological unit both in history and anthropology*. The final product of both history and anthropology is the text, which, as Mikhail Bakhtin has shown, does not exist without dialogue. Dialogue on the other hand is made possible through the dialectical juxtaposition of the self and the other; without this juxtaposition neither dialogue nor text exists (Bakhtin 1975). In other words, if there were no self, there would be no text; if there were no other, there would be no object of study, unless the self becomes the object. Diminishing the role of the self or the role of the other inevitably paralyzes the discipline, or, paraphrasing Bakhtin, makes dialogue impossible. Today, the imposing of self in the style of Malinowski or Radcliffe-Brown is not in fashion. Instead, anthropologists prefer to give more voice to the other. Doing so in history is more difficult, yet possible. Ancient Romans or Egyptians can speak for themselves in the same way as the contemporary !Kung bushmen. It is simply more difficult to discover their voices. This research directly addresses this issue.

6. *Synchronic and diachronic aspects of human societies interplay in history and anthropology*. No society, no group, no individuals can be looked at, described or studied from a timeless status quo perspective. It is a delusion to think that ethnography, ethnology and anthropology can alienate temporal factors by studying local groups from a purely synchronic perspective. By the same token, history cannot be limited to a diachronic study of change within human society. To the historian, synchronic aspects are as important as diachronic. Temporal and spatial, synchronic and diachronic, structural and specific, self and other are all dialectical opposites in a purely Hegelian sense.

To sum up, *cultural anthropology and history have multiple, fluid and coterminous identities*. To give an example, Bernard Lewis is a historian. His theoretical stance is anthropological. 'Remembered, recovered, and invented history' is an anthropological construct suggested by a historian. Lewis's work is an example of how anthropology and history can work together (Lewis 1975). In my research, anthropology and history are merely kin.

Subjective Humanism

Against this background, the method of this dissertation is humanistic, subjective, reflective, and structural. Aimed at the creation of holistic and interpretative narratives, it is designed to describe, explain and conceptualize the phenomena of the past through a conjunctive analysis of archaeological and textual data. Its underlying philosophy can be summarized in four brief points.[1]

1. *The study of the past – whether anthropological or historical – is innately humanistic*. In philosophical terms, this means that free will dominates necessity and that necessity plays minor or no role in an historical process. In this, I follow the ideas of social thinkers such as Benedetto Croce and Isaiah Berlin, and strongly disagree with any kind of environmental, economical or biological determinism. The objects of historical and anthropological study – the events, phenomena and processes of the past – are, first and foremost, the products of human will, intellect and action, rather than of the

[1] Going deeper into epistemology is beyond the task of the present research.

environment, the forces of production or any other non-human factors. Human agency – whether individual or in groups – is the main driving force beyond history. This premise I believe applies to the entirety of historical process. Biologically, the humans responsible for the transition from the Middle to the Upper Paleolithic are not any different from the humans responsible for the invention of writing in the Near East or the humans responsible for the Industrial Revolution in Europe. Having different technologies, ideologies and social institutions, they all acted consciously and were led by their intellect and will.

2. *Regularities, patterns and structures as well as analytical models are the essential products of the study of the remote past, particularly if this past is known from fragmentary material remains.* That the human agency is responsible for the course of history does not mean that we should divert our attention from the *longue dureé* back to *l'histoire événementielle* (Braudel 1980: 27). Being both the reflection of the past and the product of our thoughts, structures and models are bridges between the subject and the object, the past and the present, the self and the other, and the emic and the etic. Yet, this transitional aspect of their existence does not prevent them from the creation of a realistic and relatively objective picture of the past. My favorite example of how, being the products of our ideologies and imagination, highly analytical models and deep historical structures can contribute to the understanding of the past is *Metahistory* by Hayden White (1973). Importantly, focusing on structures and models does not necessarily exclude the primacy of human agency; just on the opposite. If seen as the products and expressions of the agency rather than the things in themselves, structures and models reinforce the dominant role of the agency in a historical process.

3. *There can be no purely scientific and objective interpretation of the past, for any anthropological or historical narrative that purports to represent the past has a poetic component in it and is subject to the same structural, stylistic and linguistic analysis as any other narrative prose discourse.* On this, I follow the ideas of Hayden White and particularly his model of "the deep structure of the historical imagination" (White 1973: IX). Although this model is designed primarily for the Western historiography, its implications are, in my view, far-reaching; it can be applied to a wide range of texts that purport to portray the past. For example, the levels of conceptualization distinguished by White – chronicle, story, mode of emplotment, mode of argument, and mode of ideological implication – are equally typical of anthropological and historical narratives (White 1973: 2). The modes of argument – the Formism, Organicism, Mechanism and Contextualism [2] – characterize even a wider range of analytical prose and, as I will show in the fifth chapter, can be applied to the analysis of ancient historical models. Importantly, however none of these discredit the positivistic component of the study of the past. Regardless of whether the truth exists and whether it is comprehensible, the desire to acquire it is what matters.

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[2] *Formism* is defined as dispersive, focused on the data rather than integrative schemes. Its goal, in White's words, is "the depiction of the variety, color, and vividness of the historical field" (White 1973 14). *Organicist* and *Mechanistic* modes are seen as aimed at abstraction. Individual entities become less important "than the classes of phenomena to which they can be shown to belong; …these classes in turn are less important… than the laws their regularities are presumed to manifest" (White 1973: 17). Both modes are integrative, structural and aim at discerning the laws of history. The difference is that *Organicism* is synthetic whereas *Mechanism* is reductive. Finally, the *Contextualist* mode is aimed at functions and hidden meanings, or in White's own words implies that "what happened in the field can be accounted for the specification of the functional interrelationships existing among the agents and agencies occupying the field at a given time" (White 1973: 18).

4. *The sociopolitical mentality of historical agents is an intrinsic part of the events, phenomena, processes, structures and models of the past. By including these thoughts in anthropological and historical interpretations, we make the study of the past more thorough, intimate and insightful.* This premise stems from the writings of several social thinkers. Of a particular importance, in my view, are the ideas of Robin G. Collingwood and Mikhail Bakhtin. To Collingwood, the object of historical study was not "the mere event, but the thought expressed in it" (Collingwood 1946: 214). In other words, historical events were meaningless without the ideas expressed in them. For example, the murder of Caesar by Brutus was to be understood in the context of the thoughts of Brutus at the moment when he was stabbing Caesar. To Bakhtin, one of the defining features of the novelistic discourse was multivocality, i.e., the simultaneous speech of several distinct characters. In contemporary ethnology, the idea of multivocality came to mean the inclusion of the voice of the other within the narrative of scholarly texts. Following Collingwood, one could propose that not only the events, but also the phenomena, processes, and even structures and models of the past become more meaningful when placed in the context of the thoughts of historical agents. Under this scenario, the past as the subject matter of anthropology and history is inseparable from the ideas about this past by historical agents. Following Bakhtin, one could propose that multivocality is an innate feature of not only the novelistic discourse but also of any texts aimed either at the study of the present or the study of the past. In anthropological terms, this premise emphasizes the importance of an emic perspective.

Applied to the study of early complex societies, these assumptions lead to a novel method for the use of ancient texts in the interpretation of material culture. The aim of

this method is to discern structures and regularities from the phenomena and processes of the *longue dureé*. The objects of scrutiny however are humans, whose agency is conceptualized through the analysis of their sociopolitical views. These views being extracted from ancient texts and applied to the study of the *longue dureé* connect structure and agency in a holistic and humanistic picture of the past, which encompasses both the emic and etic perspectives. In other words, regardless of whether history shapes ideas or ideas shape history; literature, mythology and oral traditions absorb ideas of sociopolitical nature. In one way or another, these ideas reflect the realities of time and are innately incorporated in an historical process. Their use in the creation of archaeological interpretations is a good alternative to the use of epiphenomenal models of western scientific origin in the analysis of archaeological data.

Projected on the study of ancient South Asia, this method opens multiple and unexplored directions for research. The direction to be explored in this dissertation involves the idea of the most ancient South Asian city. Both as a concept and a phenomenon, the city has played a key role in shaping our knowledge about the emergence and initial development of ancient civilizations. The inquiry into the idea of the city in the context of ancient South Asia is a compelling and largely unexplored task. As F. R. Allchin has justly noted, "the emergence of cities and states is a neglected subject, both for archaeologists and historians of South Asia, deserving far more attention than it has so far received" (F. R Allchin 1989: 15). This dissertation is meant to contribute to this neglected subject by conceptualizing the idea of the ancient South Asian city on four analytical levels. On level 1, a representative sample of the Sanskrit and Pāli texts of the late first millennium BC and the early first millennium AD is

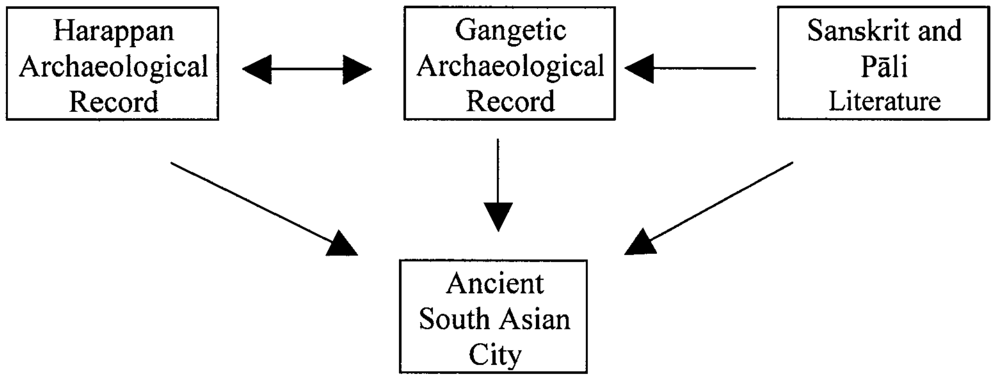


Figure 1: Three Sets of Data: The Directionality of a Conjunctive Analysis

analyzed with the goal of extracting the definitions of the city and determining whether these definitions share an ideological nucleus, i.e., a quintessential concept of the city by historical agents. On level 2, this ideological nucleus is used as a model for the analysis of the archaeology of the Ganges Civilization. The goal of this analysis is to determine whether this model can enhance the understanding of the Gangetic city in any possible way. On level 3, the same ideological nucleus is used as a model for the analysis of the archaeology of the Harappan Civilization. In a similar way, the goal of this analysis is to determine whether this model can enhance the understanding of the Harappan city. On level 4, the ideas of the Harappan and Gangetic cities are placed in the context of two ancient Indian theoretical models reminiscent of the contemporary ideas of civilization and complex society. In conclusion, a new analytical model for the nature and genesis of the ancient Indian Civilization is proposed.

The investigation of the city in this dissertation thus involves the conjunctive analysis of diverse data: the Pāli and Sanskrit literature, the archaeology of the Ganges Civilization and the archaeology of the Harappan Civilization. Clarifications need to be made on how these three very different sets of data can work together (see figures 1, 2).

The use of ideas from Sanskrit and Pali texts in the analysis of the archaeology of the Ganges Civilization should not raise too many questions. Most of the ancient texts that are used in this dissertation were compiled and recorded at the time when the cities of Ahicchatra, Bhita, Kausambi, Mathura, Sravasti and Vaisali were still flourishing. Although we cannot penetrate directly into the minds of the people who lived in these cities, it is not unreasonable to assume that the descriptions of historical and mythical cities found in the Sanskrit and Pāli texts that date roughly to the late first millennium BC and the early first millennium AD were inspired by actual historical examples.

The use of ideas from Sanskrit and Pāli texts in the analysis of the archaeology of the Harappan Civilization is a much more contentious issue. The compilers of these texts were clearly not historical agents of the Harappan Civilization. Their analytical perspectives are as remote to the realities of the Harappan Civilization as our analytical perspectives to the birth of Christianity or the fall of the Roman Empire. In anthropological archaeology however, comparing two separate archaeological entities is a widely practiced method. Scholars have compared Egypt with Mesopotamia, Mesoamerica with Mesopotamia, Mesopotamia with the Harappan civilization, American South West with Mesoamerica, China with West Africa and so forth. In history, comparing historical processes, events or sociopolitical entities is also a widely accepted method. Scholars have compared the American Revolution with the French Revolution,

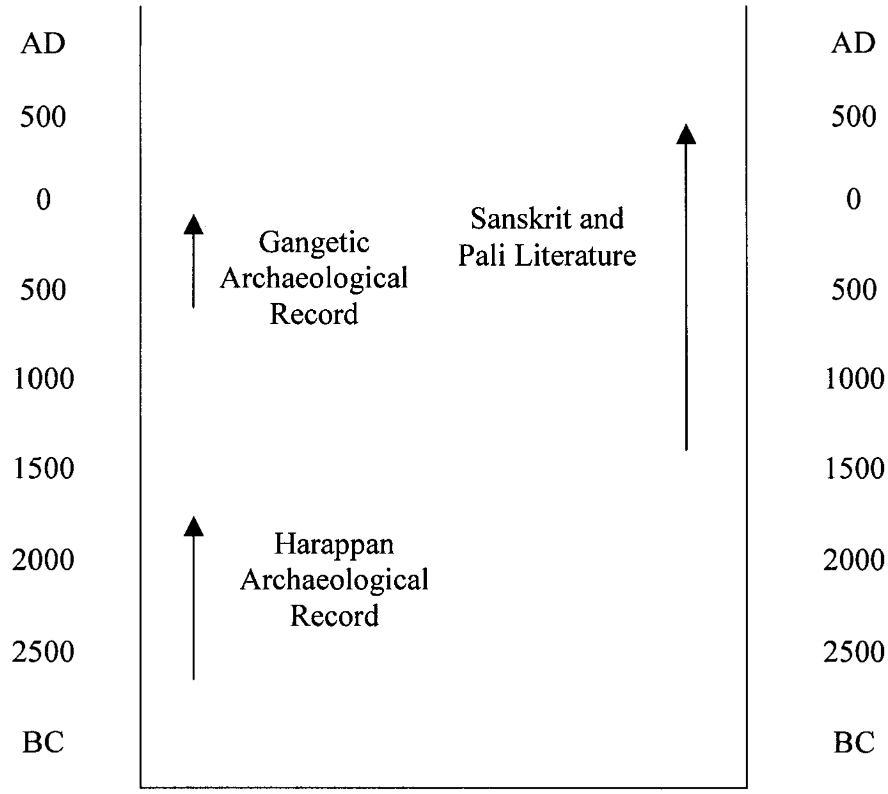


Figure 2: Archaeology and Texts: Chronological Correlations

the industrialization in Europe with the industrialization in Asia, state formation in Western Europe with state formation in Eastern Europe, and so forth. In a similar way, one can compare the idea of the city in the Ganges Civilization with the idea of the city in the Harappan Civilization. In fact, given the scale of its sociopolitical complexity, the Ganges Civilization seems to be a much more appropriate candidate for a comparison with the Harappan Civilization than the pre-urban and pastoralist Vedic society.[3]

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[3] I am aware that today some scholars view the Vedic Culture as urban and literate. I adhere to a more traditional view according to which the first hymns of the Ṛgveda are placed roughly in the second half of the second millennium BC and the Ṛgvedic society is not defined as urban.

Finally, using the ideas and models of the past extracted from ancient texts in the analysis of archaeological data is, in my view, very compelling. As I show in the fifth chapter, many ancient sociopolitical concepts are as complex and profound as most of the contemporary anthropological theory. As anthropologists and historians we however employ theoretical constructs that have very little to do with the culture-historical environment from which our data originated. Historical Materialism, Scientism, Evolutionism, Processualism, Postmodernism and other theoretical settings are epiphenomenal to the data. For example, the terms 'Feudalism' and 'Medieval' are explicitly European in origin and nature, yet without any clear justification they are vigorously used in South Asian historiography.

In summary, I believe that ancient Indian literature provides great potential for the search of alternative analytical models. It is unfortunate that the historicity of this literature is still seen by some as dubious. Let me now turn to this important and contentious issue.

The Historicity of Sanskrit and Pali Literature

Most genres of Sanskrit and Pāli literature – the Vedic canon, Tipiṭaka, Epics, Sūtras, Śāstras and Purāṇas – have been scrutinized from a variety of theoretical perspectives. The issue of their historicity is no exception. The amount of scholarly literature dealing with whole genres or the separate texts from an historical angle is quite significant. Nonetheless, the value of Sanskrit and Pali literature for historical and anthropological interpretation of South Asia's past remains highly controversial. Some

scholars believe that any use of this literature in historical reconstructions is useless. The archaeologist D. K. Chakrabarti is particularly categorical. On one occasion he asserts that "from the point of view of history-writing" the use of ancient Indian literature is "puerile, creating nothing more profound than a kind of Orientalist mist, beginning and ending in itself" (Chakrabarti 1997: 162). Other scholars believe that the ancient Indian texts not only have historical value but also can be seen as historical chronicles[4]. For example, the Sanskrit Purāṇas are still used as direct historical sources and the precise date and the location of the Mahābhārata battle are being proposed (G. P. Singh 1994).

There is no need to get into a detailed analysis of literature dealing with the historical value of Sanskrit and Pāli texts; there are several good reviews putting this literature in a chronological and thematic perspective (Bongard-Levin 2000, 2001, Bongard-Levin & Iliin 1985, 2001). Suffice it to say that aside from the extreme opinions cited above, there have been some important contributions. The works of Wilhelm Rau (1956, 1971, 1972, 1974, 1976, 1983), Elena Elizarenkova (1999), Romila Thapar (1976, 1978, 1984, 2000a, 2003), George Erdosy (1988, 1989, 1994, 1995b, 1995c) and Michael Witzel (1987, 1989, 1991, 1995a, 1995b, 1997a, 1997b, 2001) deserve, in my opinion, particular attention; for each of these authors has found his or her own way to treat the ancient Indian texts as historical sources. Rau, Elizarenkova and Witzel have looked at the Vedic Canon as the source of historical data. Erdosy has related the development of the earliest branches of Sanskrit and Pāli texts to state formation in Northern India.

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[4] The latter view goes back to F. E. Pargiter (Pargiter 1910, 1912, 1913, 1914, 1922a) who having analyzed the Sanskrit Purāṇas came to the conclusion that in spite of their mythological narrative these texts had a historical nucleus; the Puranic lists of the lunar and solar dynasties according to Pargiter included the names of the actual North Indian rulers.

Romila Thapar being the most prolific in her ability to see history beyond texts has touched upon a large variety of sociopolitical issues of early North Indian history. Overall however, one must conclude that the perusal of the most ancient Indian literature has brought no revelations for the analysis of archaeological data. A good example of how a recent attempt to relate the results of archaeological excavations to Sanskrit texts has ended unsuccessfully is the project "The Archaeology of the Rāmāyaṇa Sites". In 1975-1986, a distinguished Indian scholar B. B. Lal took on the project aimed at verifying the historicity of the great Sanskrit epics, the Mahābhārata and Rāmāyaṇa. Under this project, Lal excavated at Ayodhya, Sringaverapura, Bharadvaja Asrama and Nandigrama, the sites featuring prominently in the Rāmāyaṇa and associated with the important events in the life of Rāma. Judging from the published results of this project, Lal provided only minimal evidence in support of the existence of a historical core beyond the epics (B. B. Lal 1981, 2002a). Neither did he manage to relate archaeological and textual data directly and convincingly.

The question then arises whether we should follow the advice of Chakrabarti and give up the attempts to relate the ancient Indian texts to history and archaeology or should continue looking into the alternative ways of using the texts in the interpretation of archaeological record. The answer to this question depends, in my view, not only on our readings of the texts but also on the definition of history as a scholarly discipline and on the ways in which the historicity of texts is evaluated; for it is my profound conviction that the reason why some scholars vehemently deny the historicity of Indian literary tradition and other scholars continuously misuse it in dubious historical reconstructions

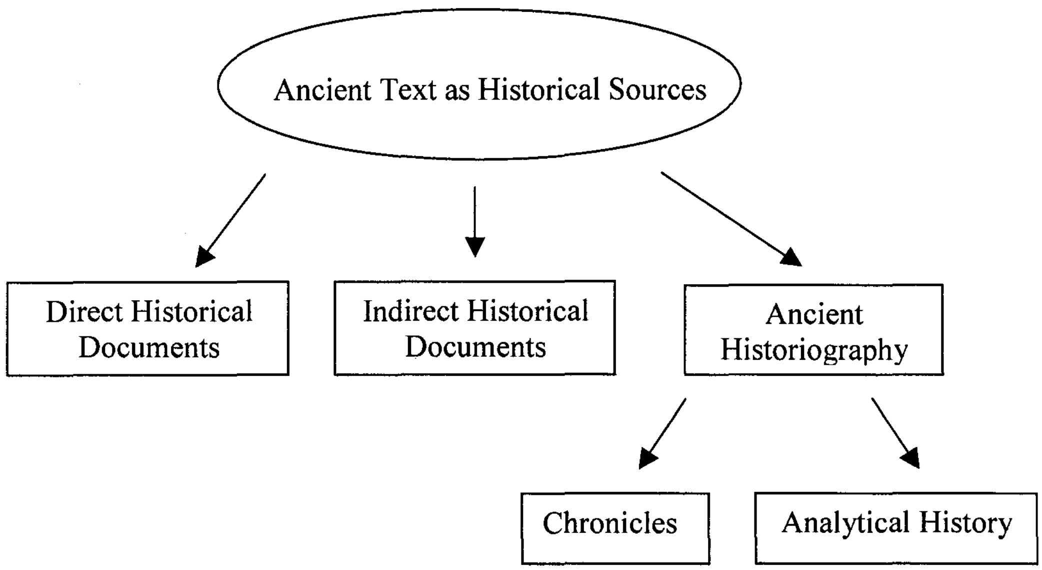


Figure 3: Ancient Texts as Historical Sources: A Classification

stems from the erroneous understandings of history rather than from the innately a-historical nature of ancient Indian literature.

There are many ways in which archaeologists as historians, archaeologists as anthropologists, and historians can classify ancient texts as historical sources. One can distinguish at least three types of such texts: direct historical documents, indirect historical documents, and the works of history per se, i.e., historiography (see figure 3).

Direct historical documents are the records of economic, political, social or cultural life of the studied societies. These can be edicts, commercial transactions, laws, political treatises, and the like. The Narmer Palette, the Laws of Hammurabbi or the hieroglyphic inscription on the staircase at Copan are the examples of this type of texts. In South Asia, aside from the undeciphered Harappan texts, the earliest well-dated

historical documents are the Aśokan inscriptions. Arguably, parts of the Sūtras, Śāstras and Purāṇas that deal with architecture, science, ritual and various aspects of daily life can be also seen as direct historical documents.

Indirect historical documents are any texts that accidentally absorb bits and pieces of historical information. The Ṛgveda is the earliest known indirect historical document in South Asia. Although not aimed at recording historical information directly, it contains data on material culture, sociopolitical organization and even economic issues.

Historiography as the intentional writing of history is characteristic of many ancient societies. Classical Greece, Imperial Rome, Han China and the Medieval Middle East had highly sophisticated traditions of history-writing. Whether ancient South Asia had historiography is a debatable issue. On one hand, as a chronicle no text of Sanskrit or Pāli literature can stand a comparison with *The Record of the Historian* by Sima Qian or *The History of Peloponnesian War* by Thucydides. On the other hand, very few ancient civilizations can boast of having such an elaborate sociopolitical theory as the one of the Kauṭilīya Arthaśāstra. One must not forget that historiography is a very multifarious activity and it is profoundly erroneous to limit its scope to the arrangement of facts into chronologically structured narratives. In fact, the overwhelming majority of historical works are deeply interpretative; instead of presenting *l'histoire événementielle*, they expound on structures, concepts, functions, meanings, regularities, causes and contexts.

Hayden White, the historian whose ideas have largely inspired me for the writing of this dissertation defines historical work as "a verbal structure in the form of a narrative prose discourse that purports to be a model, or icon of past structures" (White 1973: 2).

White's definition is so broad that it can accommodate not only all the texts written by professional historians but also some myths, religious treatises, recorded oral traditions and the historical novel. For example, the Greek myth of five ages as told by Hesiod, *the City of God* by Saint Augustine, the Biblical *Genesis*, the Epic of Sundiata, or the novel *The Three Kingdoms* by Luo Guanzhong, according to White's definition, must all be seen as historical works. In the context of Sanskrit and Pāli literature, this means that significant portions of the Purāṇa-Itihasa tradition, of the Buddhist canon and of the Jaina literature are historical. For example, the story of the four Yugas, creation myths, the genealogical sections of the Purāṇas, and the early Pāli chronicles certainly qualify to be called the works of history.

That many of the Sanskrit and Pāli texts are recorded in verse is not, in my view, an obstacle. First, there are versions of creation myths, of the Yuga story and of the genealogical lists that are recorded in prose. Second, I disagree with Hayden White that a historical work must be necessarily written in prose. Homer's Odyssey and Iliad, the Song of Roland, the Elder Edda, the Tale of Igor and the Purāṇa-Itihasa tradition – either fully or in parts – can and, in my view, should be seen as the works of history. That significant portions of these texts are mythological does not really matter. Modern social thought is rooted in mythology as well; many of its ideas arguably stem from the mix of the Greco-Roman mythology and Judeo-Christian theology. Moreover, if Levi-Strauss was right in saying that "it suffices… for history to move away from us in time or for us to move away from it in thought, for it to cease to be internalizable and to lose its intelligibility" (Levi-Strauss 1974: 255), then mythology will always remain in the background of historical and anthropological interpretations.

Ancient Indian literature thus contains a large number of historical sources. That these sources do not provide much potential for the writing of *l'histoire événementielle* does not really matter. As noted above, this dissertation is aimed at the structures and models of the *longue duree* from an *emic* perspective of the ancient texts, not at the writing of another formist chronicle from an etic perspective of the researcher. Sanskrit and Pāli literature, I believe, provides great potential for achieving this goal.

Let us consider one example. Sanskrit literature is known for its elaborate theories of the state. These theories are found in several texts: i.e. the Kauṭilīya Arthaśāstra, Yājñavalkyasmṛti, Manusmṛti, Mahābhārata, Vālmīki Rāmāyaṇa, etc. Scholars have studied the genesis, structure and textual development of these theories in great detail (Ghoshal 1959, Kane 1941-1953, Scharfe 1989, 1993, Spellman 1964). The least that these studies show is that some of these theories attained very high theoretical level and in terms of their analytical complexity, abstraction and even historical practicality are not that much different from the contemporary or recent theories of the state. The Maṇḍala Theory found in the Arthaśāstra is particularly noteworthy; for it portrays the state both iconographically and conceptually. Iconographically, the state in the Arthaśāstra is defined as a saptanga, a maṇḍala (circle) that consists of seven constituent elements – the ruler, the minister, the ally, the country, the city, the treasury, and the coercive power – and is incorporated into two other maṇḍalas: asṣṭadaśakamaṇḍala (the circle of the eighteen) and caturmaṇḍala (the circle of the four). Conceptually, the state, according to the Maṇḍala Theory, is contingent on its constituent elements, political interactionism and territorial expansionism.

In spite of this theoretical sophistication, very few archaeologists and historians have looked upon the Maṇḍala Theory or, for that matter, at any other concepts of the state found in Sanskrit literature as sources for the interpretation and conceptualization of archaeological data (F. R Allchin 1995c, Kenoyer 1997). This is particularly unfortunate for the issue of the state in proto-historic and early historic South Asia – its existence, nature and the time of emergence – is still highly controversial.

The same applies to other concepts widely used in anthropological and historical interpretations. The idea of the local idiosyncratic versions of the ideas of social complexity, civilization, the city, evolutionary progression, culture, cyclicality, knowledge, and identity can be possibly found in the ancient Indian texts. The search, extraction and analysis of these ideas can potentially help us understand and conceptualize the phenomena and events of the South Asian past through the study of its material remains. Moreover, if *we use texts as the sources for ideas rather than facts*, meticulous text-historical methods will no longer matter. On this, I follow Giorgio Bonazzoli who has proposed that orality, ritualism and the rules of recitation of the ancient Indian texts question the usefulness of some text-historical methods (Bonazzoli 1979, 1980, 1981, 1982, 1983a, b, 1985). The primary focus of Bonazolli's analysis was the Sanskrit Purāṇas, yet his observations, in my view, are applicable to the other genres of Sanskrit literature as well. The Purāṇas, according to Bonazolli, have a "multi-authenticity, each text of each age being authoritative for that particular period", and "the latest, and probably the final stage of the Puranas… is what should be taken as the starting text for any critical edition or any research" (Bonazzoli 1983a: 256). What this means is that the sociopolitical concepts found in Sanskrit and Pāli literature can be used

regardless of their precise date and textual history. As works of history, such concepts deserve no less attention than for example the theory of sociopolitical formations by Karl Marx or the idea of civilization by V. Gordon Childe.

In this respect, the investigation of the ideas of the city and civilization in the ensuing chapters of this dissertation will have hopefully laid the foundation for a novel and I believe productive direction in the study of ancient South Asia. As an alternative to the epiphenomenal ideas of the contemporary academe, this dissertation is aimed to demonstrate the way of using ideas from Sanskrit and Pāli literature in the interpretation of South Asian archaeological data. The archaeology of the Ganges and Harappan Civilizations provide ample opportunities for accomplishing this task.

The Archaeology of the Harappan and Ganges Civilizations

The Harappan and Ganges Civilizations have left behind tremendous amounts of archaeological data and produced much scholarly literature. Hence, approaching these two civilizations from a broad comparative perspective, one is forced to be extremely selective in both primary sources and analytical literature.

Primary sources: The history of exploration of the Harappan Civilization is well described by Possehl (1999, 2002b, 2002c). From the initial discovery in the beginning of the twentieth century and the first excavations at Harappa and Mohenjo-Daro in the 1920s and 1930s, tremendous progress has been achieved in the accumulation of data and the exposition of this civilization. As of 2001, G. Possehl records 1052 sites as belonging to the Mature Harappan Period (ca. 2600/2500 – 1900 BC). Ninety-seven of these sites are claimed to have been excavated (Possehl 1999, 2002a, c: 65). The number of surveys

conducted in different areas of the Harappan civilization is also quite significant (Possehl 2002a). Although the precise numbers are contentious – the definition and use of the term Mature Harappan as well as the notion of being excavated are debatable – they show that we are dealing with a significant amount of archaeological data.

The history of exploration of the Ganges Civilization is also well-described (Chakrabarti 1988, 2003). In 1860-70s, Alexander Cunningham discovered and excavated a number of large urban sites, which in his view could be identified with the places known from Sanskrit and Pāli literature (Cunningham 1871). At the turn of the twentieth century, Hoey (1892), Vogel (1905, 1908, 1909a, 1909b, 1909c, 1914, 1915, 1994), Spooner (1913, 1914), Marshall (1905, 1909, 1913, 1914, 1915a, 1915b, 1916, 1925-1926, 1927, 1928, 1929, 1930, 1934, Marshall & Konow 1908, 1909, Marshall & Vogel 1903), Bloch (1904, 1909) and several other individuals continued Cunningham's undertakings and initiated new excavations. As a result, Bhita, Mathura, Pataliputra, Rajgir, Sravasti, Vaisali and several other sites of the Greater Gangetic Doab were explored, mapped and excavated. A new dimension to the archaeology of the Gangetic Doab was given in the 1950s, when B. B. Lal excavated the site of Hastinapura and defined the sequence of the Ochre-Colored Pottery, the Painted Gray Ware and the Northern Black Polished Ware (B. B. Lal 1954-1955). Since the 1950s, many more early historical sites of the Gangetic Doab have been excavated and published.

In 1983, based on the similarities in material culture between these sites, T.N. Roy defined the concept of the Ganges Civilization (I discuss the meaning of this term shortly). According to Roy, more than 400 sites were known at the time as belonging to the mature phase of this civilization (ca 400 – 100 BC) (T. N. Roy 1983: 256). At least

several dozen of these sites had been excavated. Today, the number of surveyed and recorded sites of the Ganges Civilization must be much higher than 400. On the survey of Kanpur district conducted in 1977-1979, Lal recorded 150 sites dating from the middle of the second millennium BC to the beginning of the Mauryan Period (B. B. Lal 1984a). On the survey of Allahabad District, G. Erdosy recorded seventy-two sites (Erdosy 1988). Chakrabarti has recently published a gazetteer of several hundred early historical sites for the Lower and Middle Ganges River (Chakrabarti 2001). Overall, the Gangetic Doab contains many hundreds of archaeological sites dating to the first millennia BC and around one hundred of these sites have been partially excavated.

The ideas on the nature of the Harappan Civilization: The paradigms of understanding of the Harappan Civilization have been summarized in detail elsewhere (Kenoyer 1998, Maisels 1999, Possehl 1999, 2002c). The two most controversial and important issues of the Harappan archaeology are, in my view, its sociopolitical organization and ethnocultural identity.

The sociopolitical and ideological systems of the Harappan Civilization were initially discussed by Marshall (1931), Mackay (1935, 1948), Piggot (1950) and Wheeler (1947, 1962). Marshall (1931) envisioned the Harappans as peaceful and trade-oriented burghers who created a monotonous and boring material culture. Wheeler (1947, 1962) and Piggott (1950) pictured the Harappan Civilization as a socially hierarchical and elite-controlled polity. Both models relied on the analogies derived from European and Near Eastern archaeology. As Piggott admitted, "to a British archaeologist the inevitable parallel" was "the Roman Empire supervening upon prehistoric Iron Age barbarian settlements of his own country" (Piggott 1950: 133). The theory promulgated by Piggott

and Wheeler emphasized social disparity, the despotism of priest-kings, and the supremacy of the Sumerian Civilization. In Piggott's frequently quoted book *Prehistoric India to 1000 BC*, the Harappan Civilization was depicted as "a state ruled over by priest-kings, wielding autocratic and absolute power from two main seats of government, and with the main artery of communication between the capital cities provided by a great navigable river" (Piggott 1950: 153). Comparative, holistic and definitive, this view epitomized and concluded the first stage in the conceptualization of the Harappan sociopolitical system.

The next important contribution to the understanding of the Harappan sociopolitical organization was made by Walter Fairservis, who envisaged the Harappan polity in rigid terms of cultural evolutionism (Fairservis 1961, 1967, 1975, 1984a, b, 1992). Based on his own 'decipherment' of the script and the interpretation of archaeological record, Fairservis defined the Harappan sociopolitical system as "a hegemony of chiefdoms with paramount chiefs in each and a system of subsidiary chiefs responsible to the former" (Fairservis 1992: 133). It is unclear whether Fairservis arrived at this conclusion on his own or was influenced by the writings of the Indian scholar S.C. Malik; in the book published in 1968, Malik concluded that in accordance with the evolutionary ideas of Elman Service, the Harappan Civilization was a chiefdom (Malik 1968: 103-104).

One thing however is clear; the ideas of Fairservis and Malik inspired other scholars to reconsider their understanding of the Harappan sociopolitical system. Shaffer concluded that the Harappan civilization was "a unique experiment in the development of urban, literate culture" (Shaffer 1982: 49) He argued that the alleged homogeneity had

been exaggerated, and similarities in material culture were proxies for "an internal artifact distribution system" rather than for the control of the central government (Shaffer 1982: 45). Miller depicted the Harappan society as normative and "antagonistic to anything, which threatened it" (Daniel Miller 1985: 58). The Harappans, according to him, had no institutions of great power and wealth. They did not develop distinctive social and religious hierarchies. Their sociopolitical structure was monastic and possibly egalitarian in ideology (Daniel Miller 1985: 63-64). Possehl developed this line of argument suggesting that the Harappans lacked central government, territorial sovereignty, bureaucracy, and the monopoly of force (Possehl 1998). The Harappan sociopolitical system was unique and not to be understood with the help of a simplistic evolutionary progression of band–tribe–chiefdom–state. Nonetheless, the Harappans in Possehl's opinion had national ideology and the ideology of lineage and their ideological system was in "a constant battle against fissiparous forces: on one side, ideology, trade, ecological integration, and marriage; on the other, lineage, brotherhood, territory, history, one's occupational locus, and pride in one's social group and the memory of ancestors who helped to make it great" (Possehl 1998: 289-290). Recently, Possehl has added to this model the notions of nihilism, heterarchy and multi-leveled councils. Nihilism according to Possehl was an ideology that characterized the Harappan society after the alleged transition from the Early to Mature Harappan. Heterarchy rather than hierarchy defined most of the relations between different social groups. A series of civic and regional councils performed the duties of the government (Possehl 2002c: 55-57).

The views of the Harappan civilization as a state-level society are found in the writings of Jacobson (1986) and Kenoyer (1989b, 1991a, 1992, 1994b, 1997). Jacobson

argued that the Harappan sociopolitical structure was characterized not only by urbanization, writing, population size, geographic range, trade, colonialism and religion, but also by social stratification, full-time centralized government, police power, communication, taxes, sovereignty and militarism (Jacobson 1986). Kenoyer developed this view by suggesting that the Harappan culture was a state "composed of several competing classes of elites who maintained different levels of control over the vast regions of the Indus and Ghaggar-Hakra Valley" (Kenoyer 1991a: 369). In one of his more recent publications, Kenoyer drew parallels between the political structures of the Harappan and Ganges Civilizations and concluded that the Harappan political organization could be envisioned in the form of competing city-states (Kenoyer 1997).

Other noteworthy issues of the Harappan sociopolitical system that have been discussed in literature are the existence of caste and the meaning of urban segregation. On the issues of caste, Malik initially proposed that both the caste and its perpetuation by birth were present in the Harappan society (Malik 1968: 106-107). This view was contested by S. P. Gupta, who argued that "the material culture of the Harappans would not have died out without leaving any legacy of urbanization since the technical know-how of things would have been smoothly passing through the ages" (S. P. Gupta 1974: 58). Since then, Gupta must have revised his view; for in his recent book *The Indus-Saraswati Civilization*, he advocated the identity of the Harappan and Vedic cultures (S. P. Gupta 1996). Lamberg-Karlovsky entered the debate by assembling several archaeological traits as evidence for caste in the Harappan Civilization (Lamberg-Karlovsky 1999). On the issues of urban segregation, Kenoyer suggested that craft specialization might have been at least partially responsible for urban segregation;

onerous occupations and ceramic production, according to Kenoyer, were localized and possibly segregated (Kenoyer 1989b, 1992).

The issue of ethnocultural identity of the Harappan Civilization is even more controversial.[5] Today, many Indian scholars identify the Harappan Civilization with the Vedic literature and culture (S. P. Gupta 1996, B. B. Lal 1998, 2002b, c, Simha 1995).[6] They argue that the Rigveda presents an authentic and legitimate source for the historical reconstructions of the religion, culture and sociopolitical organization of the Harappans. Evidence in support of this view is based on the conjunctive interpretation of the Rigvedic hymns and the Harappan archaeological record. Gupta (1996) and Simha (1995), for example, believe that the Rigveda portrays an urban society, characterized by long distance trade, specialized crafts and high degree of social stratification. The Harappans, according to them, composed the Rigveda, since the Harappan Civilization was the only urban entity of ancient South Asia that fit the descriptions of the allegedly urban culture of the Rigvedic hymns. The proponents of this theory quote vigorously from the Rigveda yet rarely comment on the semantics of specific words, cultural contexts and the mythopoetic nature of the Vedic literature. Evidence centers on numerous words for houses, architecture, pottery, and other attributes of material culture (S. P. Gupta 1996: 146, Simha 1995: 189-319). Sentences like "a very large house with a thousand gates" (Rigveda VII: 88.5) are used to argue for the urban nature of the Rigvedic culture (Simha 1995). One of the proponents of this theory even claims that the

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[5] For example, see the debate between B.B. Lal and M. Witzel (B. B. Lal 1998, Witzel 2001)

[6] There is much literature on this issue, particularly in India.

Rigveda provides evidence for each of the ten characteristics of the early cities/civilizations as defined by Childe (Simha 1995). In other words, monumental architecture, social stratification and writing were all, from this point view, intrinsic to the Vedic society.

Interestingly, neither Gupta nor Singh discuss the controversy of the word ‘pur’. This is however an important question for reconstructing the lifeways of the Vedic people. Wilhelm Rau has written a whole book on this issue (Rau 1976). A more recent interpretation has been proposed by Erdosy (1994). Rau believed that the word ‘pur’ in the Rigveda meant a temporary fortified settlement consisting of earth mounds with palisades and gates. People would use them primarily for keeping cattle and occasionally would hide there themselves. Recent archaeological discoveries in Central Asia and Kazakhstan have good examples of such settlements. Some Russian archaeologists see parallels between the Rigvedic ‘pur’, the ‘var’ of Yima in the Avesta and the archaeological sites like Arkhaim and Sintashta.[7]

To conclude, both the sociopolitical system and ethnocultural identity of the Harappan civilization remain highly contentious. It is still debated whether the Harappan Civilization was an early state, chiefdom or a unique sociopolitical structure; whether caste, hierarchical ranking or heterarchical relations characterized its social system; and whether it is appropriate to allude to the Vedic literature as a source for the reconstruction of the Harappan identity. The nature of the Harappan Civilization thus in many respects

[7] There is much literature on this issue in Russian. The most elaborate argument in favor of the Indo-Aryan identity of the Andronovo Culture is found in the book *Otkuda Prishli Indoarii* (Kuzmina 1995). This book also has a good bibliography.

remains obscure. Most importantly however, the Harappan city – neither as an idea nor as an historical phenomenon – has been properly investigated. Aside from studies of the forma urbis on separate sites, there has not been a quality conceptual and holistic analysis of this ultimately most important achievement of the Harappan Civilization.

The ideas on the nature of the Ganges Civilization: The term 'Ganges Civilization' is not as common as the term Harappan/Indus Civilization. As noted above, T. N. Roy defined this term in the book *The Ganges Civilization: A critical archaeological study of the PGW and NPBW periods of the Ganga Plains of India* (T. N. Roy 1983). Roy's intention was "to re-examine the whole mass of material from the vaguely termed 'PGW and NBP periods of culture' in relation to the preceding black-and-red and black slipped wares and the succeeding Saka-Kushana culture" (T. N. Roy 1983: IX). As a result of his study, T.N. Roy proposed that the composite culture, which evolved from the mingling of the PGW and the NBPW around 700 BC, could be seen as the first phase of the Ganges Civilization. The next phase – the Mature Ganges – began around 400-300 BC and lasted until the beginning of the Saka-Kushana period. Both phases were defined by Roy through a set of distinctive cultural traits in a geographically distinct area.

Wittingly or unwittingly, T.N. Roy touched upon a very important issue, i.e., the meaning and usefulness of the terms used in the archaeology of Iron Age Northern India. Since the publication of the report on the excavations at Hastinapura, the Iron Age archaeology of Northern India has been conceptualized with the help of a few types of pottery that were meant to be chronological and cultural markers. As it turns out

however, these types of pottery – the OCP, PGW and NBPW[8] – are not only unable to represent complex cultural changes that took place in Northern India during the second and first millennia BC, but are also dubious in terms of their significance at the site of Hastinapura itself (B. B. Lal 1954-1955).[9] Other terms, such as Early Historical or Pre-Mauryan, are not much more helpful either. Vague and generic, they have been used in very different chronological, cultural and geographical contexts. For the lack of better terminology, the term 'Gangetic or Ganges Civilization' fits best the purpose of my enquiry: it is geographically focused and culturally inclusive. I shall henceforth use this term to designate a number of cultural and sociopolitical entities, which were located in the Gangetic Doab and were responsible for the second urbanization in the South Asian subcontinent in the middle of the first millennium BC.

To my knowledge, there is no good up-to-date summary of the theories on the nature of the Ganges Civilization. A very significant portion of the scholarly literature dealing with this civilization is descriptive rather than conceptual. Nonetheless, there has been some research dealing with the ancient Indian city both as an idea and an historical

[8] For the most recent syntheses on the PGW and NBPW, see (T. N. Roy 1986) and (Tripathi 1975)

[9] The PGW according to Lal's initial interpretation was the only homogenous and well-defined distinctive ceramic industry of the "Dark Age" that could be "used as a cultural label" (B. B. Lal 1954-1955: 32-33). Lal hypothesized that the distribution of the PGW may have reflected "the movement of Aryan-speaking people in western Asia and southern Europe" (B. B. Lal 1954-1955: 147). With regard to the NBPW Lal wrote the following: "This ware has quite a wide distribution ranging from Nasik in the west to Bangarh in the east. Although confined principally to northern India, it penetrated as far south as Sisupalgarh in Orissa. The remarkable uniformity in technique and appearance of this ware throughout does suggest a common centre of origin. It is observed that at the sites located in the Ganga plain it is more abundant and, in fact, outnumbers the other local ware in the main strata of its occurrence. Some of the sites in this belt are, therefore, likely to give a clue to the place of manufacture of this typical pottery" (B. B. Lal 1954-1955: 50-52). As it turns out both the PGW and NBPW were defined based on relatively small assemblages. Most importantly it is unclear what is the relationship of the PGW and NBPW to other pottery types discovered at Hastinapura.

phenomenon (F. R Allchin 1989, 1990, 1995b, Chakrabarti 1972-73, 1974, 1984, 1985a, 1985b, 1995, Dutt 1925, Erdosy 1984, 1987, 1988, Ghosh 1973, Ghurye 1939, Piggott 1945, Puri 1966, J. P. Sharma 1968a, R. S. Sharma 1966, 1968b, 1974, 1975-1976, Y. D. Sharma 1964, Thakur 1981). It will suffice to mention only those contributions, which are noteworthy due to their conceptual depth and originality.

B.B. Dutt was one of the first to discuss the nature of the ancient Indian city (Dutt 1925). Based on the analysis of the Vastuvidyā and Śilpa Śāstras – the Sanskrit architectural treatises – Dutt defined the city "as the expression of civic life" (Dutt 1925: 299-320). He argued that the architecture and layout of Indian cities reflected the origins of communalism, patriarchism and caste (Dutt 1925: 304-305). Hindu religion and spiritualism, according to Dutt, were also vividly expressed in the architectural layouts of towns and villages (Dutt 1925: 310-315). Dutt concluded that ancient Indian cities were "great schools of nationalism in its most liberal and comprehensive sense" (Dutt 1925: 320). Amalananda Ghosh conceptualized the emergence of ancient Indian cities through the interpretation of archaeological data and a limited number of literary sources (Ghosh 1973). The process of urbanization, in Ghosh's view, was spurred by the introduction of iron implements that allowed production of surplus. This surplus, through authority and trade, was diverted to support the non-food producing population. Overall, urbanization was envisioned by Ghosh as an autochthonous processes. In Ghosh's own words, "no survival nor revival of the long dead Harappan urban tradition was necessary", and "any motivating foreign influence could be easily ruled out" (Ghosh 1973: 89).

Vijay K. Thakur attempted to create a truly comprehensive and theoretical picture of the ancient Indian city (Thakur 1981). He approached the city as a whole, consisting of

economy, society, culture, and administration. As the point of departure, Thakur referred to the classical definition of the early cities by V. Gordon Childe, yet adjusted Childe's ten criteria to the Indian context. In Thakur's view, ancient Indian cities were distinguished by thirteen criteria: dense population, non-food-producing classes, reliance on a variety of food resources, strong agricultural hinterland, the presence of ruling class, fortifications, monumental architecture, writing, craft and trade guilds, monetary exchange system, concentration of surplus and foreign trade, new artistic expressions, and urban consciousness (Thakur 1981: 19). The causes that led to the second urbanization were fundamentally different from those of the first urbanization. Harappan cities, Thakur maintained, were ruled by theocratic priest-kings, whereas Gangetic cities were governed by the dharma (Thakur 1981: 84).

Chakrabarti addressed the issue of early historic urban growth from an ideational perspective (Chakrabarti 1972-73, 1974, 1984, 1985a, 1985b, 1995, 2000, 2001). Having done much research on the invention and spread of iron, he concluded that political power rather than economy or the invention of iron had played the dominant role in the emergence of Gangetic cities (Chakrabarti 1972-73, 1974, 1985a). Erdosy arrived at somewhat similar conclusion by means of a conjunctive analysis of archaeological and textual data (Erdosy 1985, 1987, 1988, 1995a). The Indian city, according to him, was a center and agent of political power, "a predator on the countryside without the innovativeness exhibited by predators in some other cultural regions, such as Europe" (Erdosy 1987: 17).

Finally, Allchin contributed significantly to the study of early historic urbanization by providing the main up-to-date synthesis (F. R Allchin 1995a) and novel

conceptual analyses (F. R Allchin 1989, 1990). Early historic urbanization, in Allchin's view, was "a dynamic process, arising independently in several areas, and spreading, in a span of two to three centuries, throughout the whole subcontinent" (F. R Allchin 1990: 170). The construction of ramparts and fortifications was a hallmark of the emergence of cities and city-states and the two areas, which first experienced the emergence of cities were the North-West Frontier region of Pakistan and the Ganga-Yamuna Doab with the middle Ganges regions (F. R Allchin 1989: 14).

The study of the early historic city thus appears to have been much more substantial than the study of the Harappan city. Nonetheless, the idea of the early historic city still remains a poorly investigated subject. Not getting into a detailed critique of the aforementioned theories – many of them are clearly outdated – one must conclude that no one has so far attempted to approach the city from the theoretical angle proposed in this dissertation. Historical agents are still mute. We don't know what they thought about their cities and whether these thoughts have any use for the analysis of archaeological data.

Comparative and holistic interpretations: Aside from the notorious correlations of the Harappan Civilization with the Vedic literature, there is a clear lack of conceptual and comparative studies of the Harappan and Ganges Civilizations. Malik, without doubt, made the main contribution to the comparative and holistic study of the ancient Indian Civilization. In his pathbreaking book *Indian Civilization: The Formative Period*, Malik introduced the concept of Indian Style and claimed to have traced its emergence during the Mature Harappan period. The Indian Style, in Malik's definition, included "the unique institution of caste," "the genealogical means of the perpetuation of caste status by

birth," and "the importance which is given to the memorization process, especially in descent reckoning, ritual prayers, etc., which are all learnt by oral repetition (substitution of writing)" (Malik 1968: 106-108).

Nonetheless, the writings of S.C. Malik (1968, 1975, 1979), D.K. Chakrabarti (1972-73, 1974, 1995), S.P. Gupta (1974), J.M. Kenoyer (1995, 1997), Jim Shaffer (1992, 1993) and a few others are the occasional exceptions rather than the products of an established scholarly tradition. The study of ancient South Asia is in urgent need of a novel holistic study of the Harappan and Ganges Civilizations. In this respect, of a great interest is a recent article by Kenoyer on the Harappan and Gangetic city-states (Kenoyer 1997). In this article, Kenoyer attempts to combine the archaeology of the Harappan Civilization, the archaeology of the Ganges Civilization, and the ancient Indian sociopolitical theory, i.e., the Maṇḍala Theory from the Kauṭilīya Arthaśāstra. Kenoyer's work however is an exception. Moreover, the author relies primarily on archaeological data and does not use the texts to their full potential.

Conclusion: Three Sets of Data

Given the above, I have chosen three sets of data for the analysis in this dissertation:

1. A sample of Sanskrit and Pāli texts which can shed light on how the idea of the city was envisioned in ancient India;

2. A sample of archaeological sites of the Ganges Civilization to be used for the testing of theoretical models extracted from the texts

3. A sample of archaeological sites of the Harappan Civilization to be used for the testing of the same theoretical models.

The first set of data includes excerpts from the following texts: the Aṅguttara-Nikāya, the Kauṭilīya Arthaśāstra, the Vālmīki Rāmāyaṇa, the Mahābhārata, the Milindapañha, the Vāyupurāṇa, and the Brahmāṇḍapurāṇa. The date, nature and the decision behind the choice of these texts are explained in the second and fifth chapters.

Choosing archaeological sites for the second and third sets of data. I have considered the following factors:

1. Quality and availability of archaeological data: This is by far the most important factor. Sringaverapura, for example, is a very interesting and potentially important site. It features prominently in the Valmiki Ramayana, and reveals a continuous sequence of cultures from the OCW to the British rule. B. B. Lal excavated at Sringaverapura for almost ten years; yet, save for a volume on water tanks, did not publish a comprehensive report (B. B. Lal 1993, B. B. Lal & Dikshit 1978-1979, 1997). Kampilya is another interesting site that features prominently in the Mahabharata. A team of Italian archaeologists and Indologists surveyed and mapped this site, yet did not conduct any excavations (Filippi & Marcolongo 1999). Some sites were excavated on a very small scale. For example, one of the excavations at Rajgir was basically a scraping of a section at the foot of a hill (Ghosh 1951). On the other hand, the sites of Atranjikhera, Rajghat, Vaisali and Sravasti have been excavated and published relatively well. The same applies to the sites of the Harappan Civilization.

2. Geographical diversity: I have tried to include sites representing several distinct regions of the Gangetic and Harappan Civilization. However, the quality and availability

of archaeological data prevented me from representing all distinct areas equally. For example, the Lower Gangetic Doab is still poorly known (Chakrabarti 2001). Consequently, I was not able to include in my analysis any sites from that region.

3. Diversity in scale: Several Gangetic and Harappan sites are extremely large. Kausambi occupies an area of almost eight sq. km. Ahicchatra is spread over one hundred and eighty hectares. The size of Pataliputra during the Mauryan Period was possibly close to the size of modern Patna. At the same time, there are sites like Prahladpur, Sonpur or Sonkh each occupying an area of only several hectares. As attention is usually given only to large sites, I have chosen several sites of smaller scale for an analysis in the present research.

4. Historical role: This criterion applies only to Gangetic sites, for many of them feature prominently in Sanskrit and Pāli sources. For example, Rajgir according to the literary sources was the first capital of Magadha. Sravasti was the capital of Kosala. Vaisali was the capital of the republic of Licchavis. Some places played an important role in the life of the Buddha and Mahavira. As in the case of Hastinapura however, archaeological data often failed to confirm the glory assigned to these cities by the literary tradition. Most Gangetic sites chosen here for analysis play a prominent role in literary sources.

5. The limitations of the present research: Time constraints and the broad comparative nature of this research make it impossible to utilize all the existing data. Consequently, the choice of data is at least partly subject to random sampling and the personal biases of the author.

Having thoroughly considered each of these factors, I have chosen thirteen Gangetic and twelve Harappan sites for a close investigation. The chosen Gangetic sites include Ahicchatra, Atranjikhera, Bhita, Hastinapura, Kausambi, Mathura, Pataliputra, Rajghat, Rajgir, Sonkh, Sonpur, Vaisali, and Sravasti. The chosen Harappan sites include: Allahdino, Banawali, Chanhu-Daro, Dholavira, Harappa, Kalibangan, Kot-Diji, Lothal, Mohenjo-Daro, Nausharo, Surkotada, and Sutkagen-Dor.

Chapter 2. The Chimera of the City: From Saint Augustine to Ancient Indian Literature

> Ancient and modern cities share only traits of so general a character that they are virtually useless for classificatory or analytical purposes.
>
> (Wheatley 1972: 601)

Introduction

The idea of the city has produced an immense amount of literature in several fields of knowledge. Architects, geographers, sociologists, economists, historians, archaeologists, ethnographers, philosophers and theologians have tackled the idea of the city for many centuries. On one hand, thinkers like Spengler, Weber, Mumford, and Doxiades have brought about generic definitions highlighting morphological or functional traits that are allegedly shared by all cities. On the other hand, anthropologists, historians and ethnographers have produced a myriad of case-studies pointing to the uniqueness of each individual case.

To reconcile generic definitions with case studies is difficult and unnecessary. The city both as an idea and an historical phenomenon is so multifarious that it can accommodate almost any approach, whether it is the Central Place Theory, Ekistics or a murky historical poeticism in the style of Oswald Spengler. This chapter has two parts. The first part reviews several key ideas and draws conclusions on the intelligibility of the city as an idea and an historical phenomenon. The aim of the second part is to propose a

model for the study of the ancient Indian city based on the descriptions and definitions of cities found in Sanskrit and Pāli texts. The chapter ends with remarks on how the model extracted from the texts can be used in the analysis of archaeological record.

Torn between the Two Cities

The intellectual legacy beyond the idea of the city is so immense that it would be unrealistic and unnecessary to attempt a comprehensive review. It is sufficient to refer to several key thinkers whose ideas represent different disciplines and mark major developments in the western understanding of the city. Let Saint Augustine speak for theologians, Oswald Spengler for philosophers, Max Weber for sociologists, Lewis Mumford for historians, Walter Christaller for geographers, and Konstantinos Doxiadis for economists. In conclusion, I juxtapose the views of these generic thinkers with a recent case-study, an ethnography of the Newar city of Bhaktapur by the anthropologist Robert Levy and consequently present my own view on the intelligibility of the city.

The City of God by Saint Augustine is a theological treatise having to do with a holistic picture of the world and the church, written from a perspective of an early Christian mystic.[10] Aside from theology and mysticism, *The City of God* presents a multiplicity of ideas on history, philosophy and politics. It would not be an exaggeration to say that many of these ideas laid the foundation for western historical and sociopolitical thought for many centuries ahead. The ideas of linearity, inevitability, rationality, statehood, civility, and even the prototype of the idea of progress can be

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[10] Saint Augustine wrote this treatise soon after Rome fell to the Goths in 410

found in *The City of God*. It is not surprising that still this treatise attracts the attention of scholars from several different disciplines (Donnelly 1995, O'Daly 1999).

One of the main themes of *The City of God* is the dualism of two cities: the *Civitas Terrena* (the Earthly City) and the *Civitas Dei* (the City of God). This theme was not new at the time of Saint Augustine. In the Old and New Testaments, there were many references to the duality of the city. Moreover, the theme of the city featured prominently in the Latin literature of the fourth century AD (see Cicero, Marcus Aurelius, Seneca or the debate of Symmachus and Ambrose). Nonetheless, Saint Augustine's approach was truly novel. He narrated world history in the context of two intermingled processes: the history of the Earthen City and the history of the City of God. The idea of the city, although not explicitly defined, played an important role in this narrative.

The use of the word *civitas* (city) by Augustine is allegorical and figurative. There is a debate among scholars on what exactly Augustine meant by using this term: the state, the two communities of men, or some kind of a sociopolitical system (Donnelly 1995: 203). In spite of what the answer is, it is clear that Augustine used this term consciously and by using it implied a high degree of historical realism. Manifestations of this realism are found throughout the treatise and can be exemplified in the three following observations. First, the notions of the two cities are inspired by real historical examples. Aside from mysticism and scholastic speculations, Augustine describes in detail Rome, Jerusalem, Athens and Babylon. The history of Rome plays a particularly important role in his narrative. Second, the City of God and the Earthly City are intermingled in history. Depending on the context, Jerusalem becomes either the City of God or the Earthly City. For example, in the same sentence of book XVII, Jerusalem is described as the Earthly

City "which is in bondage with her children" and "the true city of God... eternal in the heavens, whose children are all those that live according to God in the earth" (Augustine 1993: 570). Third, the description of the Earthly City displays elements of positivist historical analysis (see Book XV.4). The Earthly City is torn by wars, conflicts and disasters. "...it desires earthly peace for the sake of enjoying earthly goods,...it makes war in order to attain to this peace" (Augustine 1993: 481).

In sum, it does not really matter whether the city, in Augustine's view, meant the state, a community of men or something else. That the idea of the city was backed by the historical examples of Rome, Babylon, Jerusalem, and Athens, that the history of the earthen city displayed historical realism and, most importantly, that the city was seen as a key analytical concept were great achievements in and unto themselves. By envisioning the entire world history through the idea of the city, Saint Augustine envisioned the city as an analytical whole of unprecedented significance and elevated it to the highest theoretical levels. In my view, this was one of his greatest and long-lived theoretical achievements, which in many respects laid the foundations for the further development of the idea of the city. Following Augustine, many thinkers have referred to the idea of the city as the key element of the historical process. Yet, it was not until the beginning of the twentieth century that the view of the city as the quintessence of human history reached its apogee in the writings of the German philosopher, Oswald Spengler.

Spengler's *Der Untergang des Abendlandes* was a popular read in Europe at the beginning of the twentieth century (Spengler 1918). Published at the end of World War I it met the aspirations of its time and audience very well. As a new philosophy of history, it aimed at discerning the ethos of history, civilization and culture. The theme of the city

appears in the second volume, in the chapter titled "The soul of the city". Extremely expressive and in parts poetic, this chapter presents a powerful panegyric, in which the city is presented as the greatest achievement of civilization, history and culture. In making his point, Spengler is categorical: "All great Cultures… are town-cultures... Higher man… is a town-tied animal. …World history is the history of civic man" (Spengler 1950: II.90). The ethos of the city, in Spengler's view, lies in its soul. The birth of this soul is a miracle. This soul is a totality and organism, which "lives, breathes, grows and acquires a face and an inner form and history." The presence of this soul, not the size, is what distinguishes the city from the village. The city, is "a place from which countryside is… regarded, felt and experienced…". The city is "a unit objectively expressing the form-language and style-history that accompanies the Culture throughout its life course" (Spengler 1950: II.90-91). Spengler classifies cities in three categories: the town, the city, and the world-city. The distinction is the matter of spirit, not the number of inhabitants (Spengler 1950: II.97). The world-city is the ultimate goal. It arises as "the monstrous symbol and vessel of the completely emancipated intellect". It is "the center in which the course of a world-history ends by winding itself up" (Spengler 1950: II.98). The fate of the city is doomed; it self-destructs. As Spengler puts it: "…growing from primitive barter-center to Culture-city and at last to world-city", the city "sacrifices first the blood and soul of its creators to the needs of its majestic evolution, and then the last flower of that growth to the spirit of Civilization – and so, doomed, moves on to final self destruction" (Spengler 1950: II.107). The vision of the city by Spengler, I believe, dwells on the ideas of Augustine. Both in *The City of God* and in *The Decline of the West*, the city is portrayed as the key element of history. As Spengler concludes,

> ...we cannot comprehend political and economic history at all unless we realize that the city, with its gradual detachment from and final bankrupting of the country, is the determinative form to which the course and sense of higher history generally confirms (Spengler 1950: II.95).

Aside from Spengler, no work on ancient or modern urbanism is written without a reference to Max Weber. *Wirtschaft und Gesellschaft* by Weber is the classic of urban sociology and of western-oriented approaches to urban studies (Weber 1922). In contrast to Spengler's explicitly anti-scientific and anti-structural approach, Weber created a very prosaic concept of the city. In Weber's view, urban communities, "in the full meaning of this word, appear... only in the Occident" (Weber 1958: 80). In other words, China, South East Asia, India, Mesoamerica and many other parts of the world did not know urbanism whatsoever! There are a few exceptions in the Near East, i.e. Syria, Phoenicia and Mesopotamia. Nevertheless, even in these regions, the emergence of urban communities is occasional and rudimentary (Weber 1958: 80). This startling conclusion stems from Weber's formalist sociological method of defining an urban community. The true urban community, in Weber's view, must display "a predominance of trade-commercial relations" and be characterized by five features: "a fortification, a market, a court of its own and at least partially autonomous law, a related form of association, and at least partial autonomy and autocephaly, thus also an administration by authorities in the election of whom the burghers participated" (Weber 1958: 81). Strictly following this definition, even many cities of Europe would not classify as urban communities. Neither could most contemporary urban conglomerates be called cities. Aimed at rigid scientific analysis, Weber's theory is impeccably formalist yet barely applicable to actual case-studies.

Another frequently quoted example of a western-oriented approach to the study of the city is *The City in History* by Lewis Mumford (1961). The definition of the city suggested by Mumford in this lengthy treatise is systemic, structural, cosmic, symbolic and closely associated with the idea of civilization. The city is defined by Mumford as,

> a structure specially equipped to store and transmit the goods of civilization, sufficiently condensed to afford the maximum amount of facilities in a minimum space, but also capable of structural enlargement to enable it to find a place for the changing needs and the more complex forms of a growing society and its cumulative social heritage (Mumford 1961: 30).

So far as the cosmic role of the city is concerned, Mumford envisions it as "the means of bringing heaven down the earth" and as "a symbol of the possible" (Mumford 1961: 31). Adhering to the ideas of Mircea Eliade, he believes that the symbolic purpose antedates any other functions of the city. The western centrism of Mumford is striking. Teotihuacan, Monte Alban and Anyang are not even mentioned, and it is asserted that urbanism diffused from the Old World to the New World. Some archetypal ideas, according to Mumford, must have been borne by traders, explorers or religious missionaries. A possibility of independent invention is totally excluded because of the alleged parallelism in urban forms (Mumford 1961: 91).

Understandably, the writings of Weber and Mumford are not very popular among specialists in the early complex societies. Today, archaeologists seem to prefer theories from geography and economy. Central Place Theory has played a particularly prominent role in the recent archaeological literature. In 1933, the German scholar Walter Christaller published a book on settlement geography (Siedlungsgeographie). Christaller's task was to establish patterns of settling a large area, i.e. the laws determining number, distribution and sizes of settlements (Christaller 1933). Christaller

characterized the nature of research as either national economics or economic geography, and emphasized that the questions and problems he dealt with were purely geographical (Christaller 1966: 201). Following the ideas by his predecessor Robert Gradman (1916, 1926), Christaller tentatively defined the town as a "center of its rural surroundings and mediator of local commerce with the outside world" (Christaller 1966: 16). Given this, it is important to realize that Christaller purposely avoided using the terms 'town' or 'city'. The idea of centrality, in Christaller's view, applied not only to towns but also to market shops and other places. Meanwhile, there were towns, which did not, or only in a very small measure, showed centrality. Christaller unambiguously stated that he dealt neither with settlement or economic units, nor with political communities. The unit of his study was the central place, not the town or for that matter any other settlement (!). Christaller distinguished four types of central places: central places of higher order, central places of a lower order, central places of the lowest order, and auxiliary central places (Christaller 1966: 16-17). The dispersed places were the opposite of the central places. Christaller distinguished three types of dispersed places: "the areally-bound ones – those settlements the inhabitants of which live on their agricultural activities, which are conditioned by the land area surrounding them," "the point-based ones – those settlements the inhabitants of which make their living from resources found at a specific locations" (Christaller 1966: 16), and "those which are not bound to a central point, and area, or an absolute point" (Christaller 1966: 17). Again, it is important to realize that dispersed places were not necessarily equal to rural settlements or villages. Like the central place, the dispersed place was a term in itself with its own independent meaning. The network of central and dispersed places constituted settlement systems, which were the object of Christaller's

investigation. Christaller convincingly managed to show that from the point of view of market economy, these systems revealed regular patterns of size, distribution and numbers of settlements (Christaller 1966: 164-166).

Another attempt at a systematic analysis of human settlements was undertaken by the Greek scholar Constantinos Doxiadis whose intention was to create a new discipline that would deal exclusively with human settlements. Doxiadis named this discipline Ekistics. Ekistics, according to Doxiadis, had both practical and theoretical implications. On the one hand, it was expected to solve the crisis in human settlements. On the other hand, it was driven by the desire to bring together "the facts, concepts and ideas related to human settlements" and "to readjust the disciplines and professions connected with the settlements" (Doxiades 1968: 15). Ekistics was meant to have a truly holistic nature and to systematize human settlements in their totality. Based on size and function, Doxiadis defined eight types of settlements: isolated settlements, nomadic settlements, agricultural settlements, urban-agricultural settlements, towns and cities (one category), metropolis, dynametropolis, and dynamegalopolis. Each of these eight categories was carefully defined, described and sub-divided. For example, the category of towns and cities was characterized as follows,

> Their main characteristic is that they are static. This, in the past, was expressed by the fact that they were usually surrounded by walls, and even when they were not, they remained compact since no urban dweller could live out in the open countryside... they contain two to twenty thousand people and sometimes even up to fifty and a hundred thousand; but they seldom go beyond this. Only very few cities of the past are known to have had a population in the hundreds of thousands and these were the administrative capitals of empires... (Doxiades 1968: 91).

In addition, each of the eight categories was sub-divided into types. For example, towns and cities were classified into eleven types in accordance with their anatomy,

structure and dynamics (Doxiades 1968: 156-157). In a sense, Doxiadis created an evolutionary progression. Settlements developed like organisms from the earliest prehistoric forms that would eventually merge into the single city of the future, the Ecumenopolis.

Such is a brief summary of the six grand theories that aim at the generic definition of the city. *What unites these concepts is that they assume the existence of one true definition. Despite all the differences between their teaching, Saint Augustine, Spengler, Weber, Mumford and Doxiadis believed that the city was an organic and intelligible whole*. Not denying the value of this premise for broad cross-cultural and philosophical studies, I nonetheless believe it has very little use in the context of specific historical cases. To demonstrate this, let us consider one example: a recent ethnography of the Newar city of Bhaktapur by the anthropologist Robert Levy (1984).

Theoretically, Levy follows the long-forgotten yet in my view quite interesting ideas of the nineteenth century French historian Fustel de Coulange (1864) who saw the city in a very particularistic way, as a self-sufficient and idiosyncratic entity consisting of autonomous units. The main theme of Levy's study is what he calls "a poetic imagination" or Bhaktapur (Levy 1984: 599). The author spends a good deal of time describing and analyzing symbolic forms, spheres, structures and opposites which make, in his view, Bhaktapur's system meaningful. Among other traits, he looks at the pantheon, religion, purity and power. He distinguishes what he terms 'resources for intelligibility', which include hierarchical levels of phenomena and ideas, discrete categories, membership in assigned domains, amorphous boundaries between the spheres, and the systematic ordering of Bhaktapur's mesocosm (Levy 1984: 601-615). The

conclusions that Levy arrives at stand in striking contrast to generic urban theories. "In both fact and ideology" Bhaktapur is depicted by Levy as self-sufficient and 'turned in on itself'. Very little of its world is part of larger economic or political networks. Both economy and politics are of local nature and significance (Levy 1984: 68). Levy concludes with a myriad of statements, all in one way or another reiterating the holistic, self-sufficient, idiosyncratic and symbolic nature of Bhaktapur's world. On one occasion, Levy maintains that "bits and pieces" of Bhaktapur's mesocosm construct "an aesthetic and philosophical unity" like a "Wagnerian multidimensional artwork" (Levy 1984: 615). On another occasion, he characterizes Bhaktapur's mesocosm as "a powerful device for turning accident and history into structure, for trying to escape the contingencies and consequences of history, for trying to capture change, to make change seem illusory within an enduring order" (Levy 1984: 616).

In the context of grand and generic theories, Levy's ethnography is illuminating; it shows that *despite all the developments in positivist scholarship and generic theorizing, the city remains the object of humanistic studies and its humanistic side cannot be adequately conceptualized by means of scientific methods.* If juxtaposed to the positivistic and systemic concepts, Levy's treatment of the city leads to a number of contentious and eternal questions about what the city is; as a phenomenon, as an idea, and as an object of scholarly enquiry. The essential controversy of these questions can be presented in a short list of paradoxical oppositions:

The city is	or the city is
An objective historical phenomenon	Idea in the minds of historical agents
A sociopolitical and cultural whole	A myriad of sporadic elements

An object of scientific enquiry	An object of poetic imagination
A part of complex systems	A thing in itself
A static entity	A live organism

The least that these oppositions indicate is that as an idea and an historical phenomenon *the city is innately dual. In the fifth century AD, Saint Augustine conceptualized this duality in theological terms, as an opposition between the City of God and the Earthen City. Today we see it as an opposition between the city as a product of poetic imagination and the city as an intelligible and objective whole.* Figuratively speaking, we are still torn between the two cities. Our scholarly ways of thinking have not moved us far from the theology of the medieval mystic.

Against this theoretical background, what I propose with regard to the idea of the city follows my discussion in the previous chapter and can be summarized in three brief points:

1. *There cannot be a single and universally comprehensive definition of the city.* For generic concepts of the city, whether scientific or humanistic, are not able to reflect the city in its totality. Being valuable for broad cross-cultural studies these concepts have little use for the anthropology and history of spatially and temporally restricted cases. Moreover, many generic urban theories are Eurocentric and, by definition, fail to explain the specificity of cases outside of the western world (Mumford 1961: 91, Weber 1922). Choosing to use these theories in the study of ancient civilizations, anthropologists end up concluding that these civilizations had no cities (Coe 1961, Wilson 1951: 35). To give credit to generic theoreticians, at least some of them were well aware of the limitations of their theories (Christaller 1933, Doxiades 1968).

2. *The city as a complex sociopolitical and cultural phenomenon can be studied and conceptualized in a multitude of ways from the viewpoint of several academic disciplines*. One can investigate and classify cities based on size, layout, economy, political structure, social organization, artistic life, and so on. One can look at cities from a morphological, structural or functional angle. One can approach the city internally as a system consisting of numerous elements or one can approach the city externally as part of a large network of settlements. Importantly, most of these approaches are complementary to each other, not mutually exclusive. For example, showing that Central Place Theory works in the context of a given ancient culture, does not mean that other approaches cannot be used in the context of the same culture.

3. *The city as an historical phenomenon is inseparable from the city as an idea in the minds of historical agents*. In other words, what the populace thinks about their city is important for the understanding of the phenomenon of the city. In this, I follow the subjectivist and reflective vision of history by R.G. Collingwood. As noted in the first chapter, for Collingwood the object of an historical study was "not the mere event, but the thought expressed in it" (Collingwood 1946: 214). I would add that this applies not only to historical events, i.e., the actions by historical agents, but also to historical phenomena, i.e., the products of the actions by historical agents. The city is exactly this kind of phenomenon and is consequently incomprehensible without the thought expressed in it. The thought expressed in the phenomenon of the city is, in my view, the perception of the city by the historical agents.

Fortifications and Authority

In Sanskrit and Pāli texts, there are many terms that designate units of settlements. The most frequent ones are *kuṭi*, *gāma*, *nigama*, *durga*, *pura*, *pattana*, *puṭabhedana*, and *nagara*. *Nagara* can be also subdivided into *nagaraka*, *mahānagaraka*, *rājadhānīya nagara*, *mula nagara*, *sakha nagara*, *kuḍḍa nagaraka*, *ujjangala nagaraka*, *paccantima nagara* and so forth. The Kauṭilīya Arthaśāstra has its own settlement terminology differentiating between *droṇamukha*, *sthānīya*, *karvatika*, and *sangrahana*. Scholars have tried to define and classify these terms. Yet, variations in their meanings remain obscure. In my opinion, it seems erroneous to assume that each of these terms must necessarily have an inflexible and static meaning that correlates with the size and function of a specific settlement. Some of the terms may be synonymous; other might have been ambiguous from the time of their emergence. For example, it is still debated whether the word *nigama* designates an urban or rural settlement. Given that the object of our enquiry is the idea of the city in its broad conceptual meaning, it is important to focus on the texts and passages that utilize the least ambiguous terms. The terms *durga*, *pura* and *nagara* seem to fit this purpose the best.

Cities are described in many Sanskrit and Pāli texts of the late first millennium BC and early first millennium AD. The Buddhist Canon, Śāstras, Sūtras, the Epics, the Purāṇas as well as other genres of Sanskrit and Pāli literature contain descriptions of historical, divine and ideal cities. For the analysis in this chapter, I have chosen a sample of excerpts from the seven texts: the Aṅguttara-Nikāya, the Kauṭilīya Arthaśāstra, the Vālmīki Rāmāyaṇa, the Mahābhārata, the Milindapañha, the Vāyupurāṇa, and the

Lalitāmāhātmya of the Brahmāṇḍapurāṇa. A few brief remarks need to be made with regards to the nature and date of these texts.

The Aṅguttara-Nikāya or as it is sometimes called Ekuttara is the fourth book of the Sutta-Piṭaka which is the second part (basket) of the Buddhist canon of Tipitaka (three baskets). The precise date of the compilation of the Aṅguttara-Nikāya is unclear yet most researchers agree that the core of the Sutta-Piṭaka had existed by the Mauryan period (3rd – 2nd century BC) (Geiger 1968, Hinuber 1996, Law 1933, Somapala 1994) [11]. In content, the Aṅguttara-Nikāya is a religious treatise; it expounds on the foundations of the Buddhist teaching, i.e., the dhamma. The Aṅguttara consists of eleven sections each arranged according to the ascending sets of numbers. For example, the first section deals with the sets of one, the second section with the sets of two, and so on until the section of the elevens.

The Kauṭilīya Arthaśāstra is a treatise on warfare, politics and statehood, allegedly composed by one of the ministers of Chandragupta Maurya, either Kauṭilīya or Chanakya. The actual authorship and date of this treatise are the point of controversy (Hillebrandt 1923, Kalianov 1959, Kangle 1965, Rangarajan 1992, Scharfe 1993, Trautman 1971). Trautman argued that some of its chapters had been composed earlier than the other (Trautman 1971). In fact, if Trautman is right, the extant Arthaśāstra presents a compilation of several treatises composed roughly between the 3rd century BC

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[11] The first written compilation of the Buddhist canon was carried out in Sri Lanka in the 1st century BC. The language of compilation was Pāli.

and the 4th century AD. The section of the Arthaśāstra that will be analyzed in this chapter is dated by Trautman to the 2nd century AD (Trautman 1971).

The Vālmīki Rāmāyaṇa and the Mahābhārata constitute its own genre of Sanskrit literature, the Epics. Orally transmitted and recited for hundreds of years, they had not been recorded in a written form until the middle of the first millennium AD. There is an immense amount of philological literature dealing with the chronology and textual history of these two texts (Stietencron et al 1992). Given the tremendous length of the Mahābhārata, I believe it is impossible to reconstruct the precise history of its compilation, yet it is likely that its earliest oral components date to the middle of the first millennium BC.

The Milindapañha (The Dialogues of Milinda) is a non-canonical Buddhist text composed in the form of dialogues between the Indo-Greek ruler Milinda (Menander) and the Buddhist monk Nāgasena. In it, Nāgasena asks questions about the various aspects of the Buddhist teaching. The answers given by Milinda reflect the Theravāda view of Buddhism and are not any different from the teachings of the canonical texts. Most scholars date the Milindapañha to the second century AD and believe that its original version was composed in the Northwestern India.[12] It is also believed that the extant Milindapañha presents a collection of the earlier texts (Basu 1978, Demieville 1924, Fussman 1993, Hinuber 1996, Paribok 1989)

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[12] The earliest extant version of the Milindapañha is the Pali translation made in Sri Lanka

The Purāṇas form a separate genre of Sanskrit literature, comprising eighteen major texts (Māhapurāṇas) and eighteen minor texts (Upapurāṇas). As in the case with the Epics, the study of the Purāṇas have produced an immense amount of scholarly literature (Rocher 1986, Stietencron et al 1992). The dating of the Purāṇas is very difficult, for like the epics they were transmitted orally and absorbed concepts and narratives of different time and origin. The Vāyupurāṇa is usually seen as one of the earliest and most authoritative texts of the Purāṇic corpus. Most researchers date its compilation to the fourth or fifth centuries AD (Rocher 1986: 243-249).

Finally, the Lalitāmāhātmya (the glorifications of Lalitā) or as it is also called the Lalitopākhyāna (the tale of Lalitā) belongs to the genre of devotional texts attached to the Purāṇic corpus. Although technically the Lalitāmāhātmya is part of the Brahmāṇḍapurāṇa – one of the eighteen canonical Māhapurāṇas which in date and content is similar to the Vāyupurāṇa – most scholars believe that it is a later independent treatise compiled and added to the Brahmāṇḍapurāṇa by the devotees of Śakti (Rocher 1986: 156-160).

The chosen texts thus stand for more than a millennium of Sanskrit and Pāli literature and represent several literary genres and ideological traditions. Anticipating the skepticism of the philologists who favor cautious text-historical methods, I believe it is necessary to explain how and why these seven texts can work together.

That the chosen texts represent different ideologies and cover a period of over a thousand years is an advantage, for at this point my goal is not to reconstruct a textual history and genesis of the idea of the city but to determine whether there is a

quintessential ideological nucleus that unites the definitions of the city found in the texts reflective of different ideologies, religions and literary genres. The Aṅguttara-Nikāya is the product of the early Buddhist thought, the Purāṇas reflect the mature Brahmanic worldview, the Kauṭilīya Arthaśāstra presents a unique political teaching, and the great epics of the Mahābhārata and Rāmāyaṇa can be seen as an encyclopedia of ancient Indian thought and mythology.[13] The great ideological and chronological diversity represented by these texts makes it more likely that at the end we arrive at an inclusive and representative conclusion. In a similar way, in reviewing the major developments in the western views of the city, I have chosen to focus on the thinkers, who represented distinct intellectual traditions over a long period of time.

I am fully aware of the limitations of this approach. Choosing several literary excerpts to stand for a thousand years of ancient Indian thought is like trying to understand a large urban site through the excavations of one square. Nonetheless, archaeologists often theorize on state formation, urbanism, social structures and other grand anthropological issues based on very small horizontal exposures. In a similar way, I believe one can begin to investigate the idea of the city in the ancient Indian literature based on a selected sample of texts, particularly if these texts are representative of a wide range of ideologies and religions as well as of all the main types of city descriptions found in Pāli and Sanskrit literature. These types of descriptions are:

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[13] There is a massive amount of scholarly literature on the ideological and religious milieu of the MBH and RM. To date, there is no a consensual view on social background of these texts.

1. Definitions of the city as an abstract sociopolitical concept (the Aṅguttara-Nikāya);

2. Conventional manuals on the layout of cities. These descriptions are quite abundant and found primarily in the *śāstras* and the *purāṇas* (the Kauṭilīya Arthaśāstra);

3. Panegyrics on divine, mythical or historical cities. These are found in a large variety of texts: in the Buddhist canon, śāstras, purāṇas, the epics, bhakti literature, and so on (the Vālmīki Rāmāyaṇa, the Mahābhārata, Milindapañha, the Vāyupurāṇa, and the Lalitāmāhātmya).

By style and context, all of these descriptions are repetitive, standardized and hyperbolic. Consequently, scholars have argued that they are of no use for historical studies. Yet the object of our enquiry is the idea of the city, not the description of real historical places. Therefore, I believe it is not unreasonable to propose that that beyond the myriads of unreal and repetitive details these descriptions contain abstract visions of the city as a sociopolitical phenomenon. These visions are expressed in the attributes and features of the ideal cities.

The hyperbole and repetition in this case are advantageous. For example, if every single panegyric or conventional manual depicts the city as having attributes ‘x’, ‘y’ and ‘z’, this simply means that in the view of these texts, the city was defined by having attributes ‘x’, ‘y’ and ‘z’.

One of the earliest manifestations of the idea of the city in Sanskrit and Pali literature is found in the Book of the Sevens (the Sattaka Nipāta) of the Aṅguttara-Nikāya. This book is called the Book of the Sevens because each of its suttas expounds

on various sets of seven; i.e. seven auspicious qualities (AN VII.6), seven obsessions (VII.12), seven suns (VII.62) and so forth. Sutta 63 of the Book of the Sevens presents a definition of the king's frontier city, rañño paccantima nagara (AN VII.63.1) (see table 1). In the beginning of this sutta, Buddha tells the monks that in order to be properly protected, the frontier city must have seven characteristics[14] and four types of storage[15]. The seven characteristics are further defined as: the deep-seated, well dug in, immovable and unshakable pillar;[16] the deep and wide moat;[17] the wide encircling road;[18] the great armory of spear and sword;[19] the large quantity of troops;[20] a clever, intelligent and wise gate keeper[21]; and the high, wide and plastered rampart[22]. The four types of storage include: the great stores of grass, wood and water;[23] the great stores of rice and corn[24]; the great stores of sesame, beans, vetches and cereal; [25] and the great stores of medicines,

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14 sattahi nagaraparikkhārehi (AN VII.63.1)

15 catunnañ ca āhārānaṃ (AN VI.63.1)

16 esikā… gambhīraranemā sunikhātā acalā asampavedhi (AN VII.63.2)

17 parikhā… gambhīrā … vitthatā ca (AN VII.63.3)

18 anupariyāyapatho (AN VII.63.4)

19 bahuṃ āvudhaṃ sannicitaṃ (AN VII.63.5)

20 bahu balakāyo (AN VII.63.6)

21 dovāriko… paṇḍito vyatto medhāvī (AN VII.63.7)

22 pākāro… ucco c' eva vitthato ca vāsanalepanasampanno ca (AN VII.63.8)

23 bahuṃ tiṇakaṭṭhodakaṃ sannicitaṃ (AN VII.63.9)

24 bahuṃ sāliyavakaṃ sannicitaṃ (AN VII.63.10)

25 bahuṃ tilamuggamāsāparaṇṇaṃ sannicitaṃ (AN VII.63.11)

Table 1: A Definition of the City in the Anguttara Nikaya VII. 63

City Characteristics	*Auspicious Qualities*
Pillar	Faith
Moat	Conscientiousness
Encircling road	Fear of blame
Armory	Learning
Troops	Heroism
Gate-keeper	Concentration
Rampart	Wisdom

Stores	*Meditations*
Grass, wood and water	First meditation
Rice and corn	Second meditation
Sesame, beans, vetches, etc	Third meditation
Ghee, butter, oil, honey, etc	Fourth meditation

such as ghee, fresh butter, oil, honey, sugar, and salt.[26] In the concluding segment of the sutta, the seven characteristics are matched with the seven auspicious qualities of the Aryan disciple, whereas the four types of storage are matched with the four meditations. Specifically, it is said that just like the city has a pillar, an Aryan disciple has faith;[27] just

[26] bahuṃ bhesajjaṃ sannicitaṃ hoti, seyyathīdaṃ sappi navanītaṃ telaṃ madhu phāṇitaṃ loṇaṃ (AN VII.63.12)

[27] seyyathā… nagare esikā hoti…, evam eva… ariyasāvako saddho hoti (AN VII.63.13)

like the city has a moat, an Aryan disciple has consciousness; [28] just like the city has the encircling road, an Aryan disciple has fear of blame;[29] just like the city has a great armory, an Aryan disciple has learning;[30] just like the city has troops, an Aryan disciple has great energy;[31] just like the city has a gate-keeper, an Aryan disciple has concentration;[32] just like the city has a rampart, an Aryan disciple has wisdom.[33] The four meditations equated with the four types of storage are the first meditation, the second meditation, the third meditation and the fourth meditation (AN VII: 63.20-23).

The frontier city thus is conceptualized with the help of a rigid numerical formula typical of the Aṅguttara-Nikāya (see table 1). Although this makes the concept of the city somewhat dogmatic, I believe it is unlikely that the traits of the city were chosen randomly and thoughtlessly just to match the formula. As the contents of the other suttas indicate, there is a large degree of mundane practicality in the analogies provided by the Buddha. Used as succinct illustrations for the norms of the Buddhist teaching, these analogies are usually rational, logical and realistic.[34] The sutta discussed here is no exception and the definition of the frontier city represents this kind of analogy. In other

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[28] seyyathā... nagare parikhā hoti..., evam eva... ariyasāvako hirimā hoti (AN VII.63.14)

[29] seyyathā... nagare anupariyāyapatho hoti..., evam eva... ariyasāvako saddho hoti (AN VII.63.15)

[30] seyyathā... nagare bahuṃ āvudhaṃ sannicitaṃ hoti..., evam eva... ariyasāvako bahussuto hoti (AN VII.63.16)

[31] seyyathā... nagare bahu balakāyo hoti..., evam eva... ariyasāvako āraddhaviriyo viharati (AN VII.63.17)

[32] seyyathā... nagare dovāriko hoti..., evam eva... ariyasāvako satimā hoti (AN VII.63.18)

[33] seyyathā... nagare pākāro hoti..., evam eva... ariyasāvako paññavā hoti (AN VII.63.19)

[34] For example, on one occasion the Enlightened One refers to horse training (AN IV.111). On another occasion, he mentions the political role of Kosala (AN X.29).

words, the traits selected for the Sutta VII.63 must have been seen by the Theravadins as truly characteristic of the ideal frontier city. *From a morphological perspective, these traits represent five constituent elements: a pillar, fortifications, the encircling road, troops and storehouses*. Spoken by the Buddha and correlated with the qualities of a virtuous devotee, these traits in my view are indicative of the conceptualization of the idea of the city in the early Buddhist literature.

A later version of this definition is found in one of the chapters of the Milinda-pañha.[35] When the king Milinda enquires of the monk Nagasena whether Nagasena himself or any of his teachers have ever seen the Buddha, Nagasena answers negatively. Milinda then concludes that the Buddha did not exist. In response, Nagasena provides a lengthy explanation for the existence of the Buddha. The essence of this explanation is in the juxtaposition of the two cities: the *nagara*, the ordinary city built by an architect, and the *dhammanagara*, the City of Righteousness built by the Buddha. As the City of Righteousness is the work of the Buddha, Nagasena concludes that the Buddha did once exist. Prior to arriving at this conclusion, Nagasena provides a long and colorful description of the two cities.

The Ordinary City is described by Nagasena as regularly planned; with moats and ramparts all around; with strong gateways, watchtowers and battlements; with wide squares, open places and junctions; with king's highways; with lines of shops; with parks, gardens, lakes, lotus ponds, and wells; with storehouses of food; with the four varnas; with troops and barracks; with numerous craftsmen and street performers; with actors and

[35] This section is called Anumānapañha, and can be translated as "The issues of inference".

Table 2: The City of Righteousness in the Milindapañha

City Characteristics	
Rampart	Righteousness
Moat	Fear of sin
Upper battlement	Knowledge
Watchtower	Energy
Pillar	Faith
Gatekeeper	Concentration
Upper terrace	Wisdom
Market place	Suttantas
Cross-ways	Abhidhamma
Judgment hall	Vinaya
Main street	Self-possession

prostitutes; and with foreigners from different countries. The City of Righteousness is described somewhat similarly, yet with a stronger emphasis on its abundant bazaars and diverse inhabitants. The main difference between the two cities is that the City of Righteousness is given a rigid definition, whereas the Ordinary City is described in plain narrative prose. The City of Righteousness has eleven traits: a rampart, moat, upper battlement, watchtower, pillar, gatekeeper, upper terrace, market place, cross-ways, and a judgment hall. Just as in the Aṅguttara-Nikāya, each of these traits is paired with an auspicious quality, i.e. righteousness, fear of sin, knowledge, energy, faith, concentration, wisdom, suttantas, abhidhamma, vinaya, and constant self-possession (see table 2). Unlike the traits of the frontier city however, the traits of the City of Righteousness are

directly equated rather than compared with auspicious qualities; the rampart in the City of Righteousness is righteousness, the moat is the fear of sin, the upper battlement is knowledge, and so forth.[36]

Thus, by the time of the composition of the Milindapañha, the concept of the city had become more abstract and acquired two new morphological traits: a market place and a judgment hall. The main emphasis in the definition had nevertheless remained similar to that of the Aṅguttara-Nikāya; fortifications – a rampart, moat, watchtower and a gatekeeper – continued to play a paramount role in the view of the city.

In contrast to abstract definitions, the conventional manuals on city layout are found in a larger variety of texts. The most famous among these texts is the Arthaśāstra. Two chapters of the Arthaśāstra deal solely with the construction and layout of the ideal fortified settlement (*durga*) (KA 4.3-4).

In the first chapter, we are introduced to the basic principles of the construction of fortified settlements. We are told that the fortified settlements must be built in the four corners on the borderlands of the country (*janapada*). Sthānīyas, the centers for tax-collection, must be built in the center of the country. Three moats must be dug around the fortified settlement. An earthen rampart must be build next to the moat. On the rampart, a brick pavement must be erected for the movement of chariots. Towers, covered roads with hidden traps, gateways and stores for weapons must be built in various parts of the fortified settlement (KA 4.3.1-35). In the second chapter, we are given details on the

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[36] Grammatically, this duality is expressed by means of Pāli compounds: sīlapākāra, hiriparikhā, añāṇadvārakoṭṭhaka, viriyaaṭṭālaka, saddhāesikā, satidovāriko, paññāpāsāda, suttantacaccara, abhidhammasinghāṭaka, vinayavinicchaya, satipaṭṭānavīthika (MiP: 332).

internal layout of the fortified settlement (KA 2.4.1-31). Given the significance of this chapter, it is worthwhile to quote it at length:

> The layout of the site is as follows: three eastern royal roads and three northern royal roads, twelve gates with proper water drains and secret paths. General roads are four daṇḍās in width. The royal roads, the roads of regional centers, droṇamukha, the roads of regional centers, sthānīyas, country roads, the roads passing through the pastures, military roads, the roads leading to the places of cremation and the village roads are eight daṇḍas in width. Roads passing through irrigation works and forests are four daṇḍas in width. Roads for elephants and roads passing through the fields are two daṇḍas in width. Chariot roads are five aratnis in width, cattle roads are four aratnis, and roads for small animals and men are two aratnis. The residence of the king must be in the best place of the site that is of access to the four varnas. In the ninth part of the area to the north from the heart of the construction site, the king must have the palace built in accordance with the prescribed regulations, facing east or north. In the northeastern quarter, there must be places for priests, teachers, sacrifices and ablutions. Ministers should reside there too. In the southeastern quarter, there must be a kitchen, elephant stables and storage. Beyond them, in the eastern quarter, the traders in perfumes, flower garlands, and juices, as well artists of ornament and kṣatriyas. In the southeastern quarter, there must be storage, depository of legal records, and workmen's shops. In the southwestern quarter, there must be storage for metals and armory. Beyond them, traders in city grain, supervisors of production, military commanders, sellers of cooked food, drinks and meat, prostitutes, actors and vaiśyas must reside in the southern quarter. In the southwestern quarter, there must be stables for donkeys and camels and a workshop. In the northwestern quarter, houses for carriages and chariots. Beyond them, craftsmen working on wool, carpets, bamboo, leather, coats of mail, arms, and shields as well as śūdras, must reside in the western part. In the northwestern quarter, there must be shops with commodities and medications. In the northeastern part, treasury, cows, and horses. Beyond them, the deities of the city and the king, blacksmiths, jewelers and brāhmaṇs must live in the northern quarter. In free spaces on the construction site, guilds of craftsmen and foreign traders must reside. In the middle of a city, he (the king) must build walled-in little shrines for Aparājita, Aparatihata, Jayanta, Vaijayanta, and temples for Śiva, Vaiśravaṇa, Aśvins, Śrī, and Madirā. He must set up household deities in accordance with the appropriate regions[37]. (He must also erect) the gates devoted to Brāhma, Indra, Yāma, and Senāpati. Outside, one hundred dhanuses away from the moat, there must be religious monuments, holy places, groves, irrigation works, and the deities of the cardinal points in accordance with the cardinal points. The northern or the eastern areas of the cremation ground are for the higher varnas, southern areas of the cremation ground are for the lower varnas. For the violation of this, one must pay the lowest fine. The residence of heretics and caṇḍālas must be at the end of the cremation ground. He should draw boundaries for householders in accordance with their cultivated fields[38]. In these fields, by permission they (householders) should set up gardens with fruits and flowers as well as stores of grain and goods. Each enclosure of ten families must have a well. He must prepare, for several years of use,

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[37] This sentence is slightly ambiguous and allows different translations.

[38] This sentence is ambiguous and I will discuss its significance below.

> stocks of all kinds of fats, grain, sugar, salt, perfumes, medications, dried fruit, fodder, dried meat, hay, wood, metal, leather, coal, tendons, poison, horns, bamboo, bark, strong timber, weapons, shields, and stones. He must be replacing the old (stuff) with new. He must set up (an army of) elephants, horses, chariots, and infantry under the command of several leaders. Since the leaders would fear each other, the army would not commit treason. The building of frontier cities has thus been explained (KA 2.4.1.31).[39]

Scholars have previously discussed and analyzed information provided in this excerpt (Kalianov 1959, Kangle 1965). Recently, Rangarajan has given good graphic and descriptive abridgments of all the data from the Arthaśāstra (Rangarajan 1992). Yet, no one seems to have looked at the description of the durga as an idiosyncratic definition of the city. If treated this way, the city in the view of the Arthaśāstra has the following attributes: royal residence; construction plan; the alignment of streets and houses according to the cardinal directions; a network of roads; an elaborate defense system; segregation of residential areas in accordance with occupation, origin and the varṇāśrama affiliation of residents; ritual places; storehouses; stables for animals; temples; cremation grounds; an army; boundaries between households; and agricultural fields.[40]

Various versions of this definition are found in many Sanskrit Purāṇas. In the Vāyu Purāṇa, for example, the layout of durgas is discussed in the context of the innovations of the Tretā Yuga, the third stage in the sequence of cosmic ages. The Vāyu Purāṇa describes durgas very briefly. One feels that the Paurāṇikas who compiled the

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[39] Quoting from the Mahābhārata and Rāmāyaṇa, I use translations by Buitenen and Goldman, for these translations are, in my view, very good. Otherwise, all translations of Sanskrit and Pāli passages (including this one) are mine.

[40] The last attribute – agricultural fields – is controversial and depends on the translation of the sentence karmāntakṣetravaśena kuṭumbinām sīmānam sthāpayet (KA 2.4.24). I believe the sentence should be translated as follows: "[He the king] should draw boundaries for householders in accordance with their cultivated fields". Yet there are different interpretations (Kalianov 1959: 61; Kangle 1963: 81; Rangarajan 1963: 81).

Vāyu had a text of reference in mind. Possibly, such text was the Arthaśāstra. In the view of the Vāyu Purāṇa, fortified cities ought to have huge mansions, ramparts, gates and a moat (VP 1.8.103-105). The difference between the city and the village is purely a matter of scale. We are told that a hamlet must be two times smaller in diameter than a city, whereas a village is bigger than a hamlet (VP 1.8.111.2). Similar descriptions are found in other Mahāpurāṇas

Like the conventional manuals, panegyrics are numerous and can be found in a large variety of Sanskrit and Pāli texts. The description of Hastinapura of the Mahābhārata, Ayodhyā of the Vālmīki Rāmāyaṇa, Sāgala of the Milindapañha, and the divine abode of Lalitā provide good examples of this type of city descriptions.

The description of Hastinapura in the Mahābhārata is extremely conventional. In one of the episodes of the Sabhāparva, i.e., the second book of the Mahābhārata, we are told that Hastinapura was adorned with ponds and trees and its buildings were like the Kailāsa peaks all beautiful, attractive and perfectly furnished. It had gold lattices, the floors were laid with jewels, the stairs rose smoothly and so on.

> ...towered like Kailāsa peaks, attractive and well-furnished, on all sides surrounded with high stuccoed walls... The lattices were made of gold, the floors were paved with precious stones; the stairs rose gently, and the seats and appointments were large. The residences were decked with wreaths and garlands and redolent with superb aloes, white like goose feathers, quite visible from as far as a league, never too crowded, with doors equally wide, and adorned with a variety of features. Their elements were made of many metals, and thus they appeared like the Himalayan summits (MBH II.31.20-25) (Buitenen 1973: II.90).

In the Vālmīki Rāmāyaṇa, the description of Ayodhyā is not much more informative, though more reminiscent of the one in the Arthaśāstra. In the second book of the Rāmāyaṇa, the Bālākaṇḍa, Ayodhyā is portrayed as,

> ...a great and majestic city, twelve leagues long and three wide, with well-ordered avenues... adorned with a great and well-ordered royal highway, always strewn with loose blossoms and constantly sprinkled with water... provided with doors and gates... It was a fortress with deep moat impossible to cross, was unassailable by its enemies, and was filled with horses, elephants, cows, camels, and donkeys... it was filled with every kind of jewel and adorned with palatial buildings... its houses were built in close proximity to one another... it had plentiful store of śāli rice... king Daśaratha had populated the entire city with thousands of great chariot warriors...the king also peopled the city with great Brahmans who tended the sacred fires and had mastered the Vedas with their six adjunct sciences... (RM II.5) (Goldman & Sutherland 1985: 134-135).

Compared to Hastinapura and Ayodhyā, the description of Sāgala from the Milindapañha is a bit more informative. The city of Sāgala, according to the Milindapañha, has many attributes that can be assembled in seven groups. Group 1 includes parks, gardens, groves, lakes, and tanks. Group 2 is comprised of rivers, mountains, and woods. Group 3 is represented by various types of fortifications: towers, ramparts, gates, entrance archways, and moats. Group 4 is commercial: it consists of shops, merchandise and money. Group 5 includes architectural features, such as residential houses and the royal palace. Group 6 has different types of storage, i.e. a variety of warehouses full of goods and food. Group 7 includes a large variety of animals (MiP I.2).

Finally, the description of the divine city found in the Lalitāmāhātmya, a devotional attachment to the Brahmāṇḍapurāṇa, follows a similar pattern. In the Lalitāmāhātmya, we are told that the city of the goddess Lalitā has towers, city walls, and gates, as well as numerous stables for elephants, horses and chariots.

> It looks magnificent due to its royal roads and has beautiful houses for sāmantas, ministers, soldiers, the twice-born, vetālas, and the female and male śūdras. In its center stands a divine royal residence decorated with doors and gates. This residence has numerous halls... There is a luminous and beautiful throne hall, decorated with nine precious stones. A divine throne, made of Cintāmani, stands in the center of it: self-shining, matchless, reminiscent of the rising sun..." (LM 14.9-13 Translation is mine).

Such is a brief summary of the selected excerpts. Taken together, they reveal an interesting pattern. In all of the quoted texts the city is conceptualized through various morphological traits (see table 3). Yet most of these traits are not uniquely urban.[41] Roads, construction in accordance with cardinal directions, stores, animals, temples, cremation grounds, boundaries between households, trade, and the system of varṇas and āśramas are characteristic of both rural and urban settlements. *The only two traits that are unmistakably urban and feature prominently in most of the quoted excerpts are fortifications and authority.*

Fortifications play a paramount role in every single description or definition of the city that was discussed above. In the Aṅguttara-Nikāya, of the seven traits that define the frontier city, two – a rampart and a moat – are parts of fortifications and the remaining five are directly related to fortifications. Of the eleven traits, that define the City of Righteousness in the Milindapañha, four – a rampart, a moat, an upper battlement, and a watchtower – are parts of fortifications; several other directly relate to fortifications. In the Arthaśāstra, of the two chapters that describe the fortified settlements (durgas), the first chapter deals solely with an elaborate system of fortifications: three moats, an earthen rampart, a brick pavement on top of the rampart, towers, hidden traps, gateways, and so forth. The panegyrics on the legendary cities – Hastinapura, Ayodhya, Sagala, and the abode of the goddess Lalitā – always speak of deep moats, high walls, massive ramparts, towers, bastions and gates. Even in a very brief description of the durgas in the

[41] The distinction between the city and the village is murky in many ancient Indian texts. In the Arthaśāstra, for example, the titles of administrators, such as nāgarika, samāhartṛ, gopa and sthānika, are present both in urban and rural contexts (KA 2.35.1-2, 6; 2.36.1-4).

Table 3: City Traits in Sanskrit and Pāli Texts

Traits	Pn	Dn	Vn	Dg	Hs	Ay	Sg	Vp	Lm
Agricultural fields	-	-	-	+	-	-	-	-	-
Animals	-	-	-	+	-	+	+	-	+
Army	+	+	+	+	-	+	-	-	-
Authority	+	+	+	+	+	+	+	-	+
Cardinal directions	-	-	-	+	-	-	-	+	-
Construction plan	-	+	+	+	-	+	+	+	-
Cremation grounds	-	-	-	+	-	-	-	-	-
Fortifications	+	+	+	+	+	+	+	+	+
Household boundaries	-	-	-	+	-	-	-	-	-
Judgment hall	-	+	-	-	-	-	-	-	-
Parks, gardens, etc	-	+	+	-	-	-	+	-	-
Pillar	+	+	-	-	-	-	-	-	-
Roads[42]	+	+	+	+	-	+	-	+	+
Storehouses	+	+	+	+	+	+	+	-	-
Temples	-	-	+	+	-	-	-	-	-
Trade and money[43]	-	+	+	-	-	+	+	-	-
Social diversity	-	+	+	+	-	+	+	-	-

Pn The King's Frontier City, pacantima nagara, the Aṅguttara N VII.63
Dn The City of Virtuousness, dhammanagara, the Milindapañha
Vn An Ordinary City, nagara, the Milindapañha
Dg The Fortified Settlement, Durga, the Kauṭilīya Arthaśāstra 2.3-4
Hs Hastinapura, the Mahābhārata II.31.20-25
Ay Ayodhya from the Vālmīki Rāmāyaṇa II.5
Sg Sagala from the Milindapañha
Vp An ideal city from the Vāyupurāṇa 1.6.103-105
Lm The abode of Lalitā, the Lalitāmāhātmya

[42] Either king's highway, encircling roads, or crossroads

[43] Market place, shops, bazaars, etc

Vāyupurāṇa, the Pauranikas refer to fortifications rather than any other trait of the durgas.

Similar to fortifications, authority is present in most of the discussed descriptions and definitions of the city. The Arthaśāstra unambiguously states that the place for the king's residence needs to be properly selected and planned. The Mahābhārata describes Hastinapura as the capital of the Kauravas. The Vālmīki Rāmāyaṇa depicts Ayodhya as the capital of Kosala and the place of residence of king Dasaratha. The Sagala of the Milindapañha and the abode of Lalitā are portrayed as the seats of great power. Even the definitions of the Frontier City in the Aṅguttara-Nikāya and of the City of Virtuousness in the Milindapañha indicate the importance of authority. Although authority – whether divine or secular – is not mentioned in the list of traits, its presence is unambiguously clear: for the City of Virtuousness is built by the Buddha and the full name for the Frontier City is the King's Frontier City. The only example when authority is not mentioned is the description of the durga in the Vāyupurāṇa. As I have noted above however, the Pauranikas who compiled the Vāyu must have had a text of reference in mind and more importantly the reference to durgas in the Vāyu is too fragmentary to be taken seriously.

In summary, fortifications and authority appear to constitute an ideological nucleus within the discussed definitions of the city. Whether they present a quintessential concept of the city by historical agents is a question that needs to be tested against archaeological record. Henceforth, I shall treat these two traits as a hypothetical theoretical model. The further analysis of archaeological data will show whether this

model can be helpful for the conceptualization of the Gangetic and Harappan city and whether it can be seen as the Collingwoodean thought expressed in the phenomena of the past.

Conclusion: From Agency to Structure

As stated in the introduction, the purpose of this chapter has been to provide a new model for the conceptualization of the ancient Indian city through a conjunctive analysis of archaeology and texts. It has not been my intention to add another cumbersome definition of the city. Focusing on only two traits – fortifications and authority – *the model defined in this chapter is not meant to portray the city in its complexity. The value of this model is in its potential application. If used in the study of material culture, it may draw a link between agency and structure and may reveal the previously unknown aspects of the ancient Indian city; particularly so since the archaeological data of the Harappan and Ganges Civilizations provide great potential for the application of this model.*

Fortifications[44] are an innate feature of the archaeological landscape both in the Ganges and Harappan Civilizations. On the Gangetic sites, the number and magnitude of ramparts, moats, walls, gates, and bastions are striking. Moreover, fortifications are one of the few morphological elements that have been relatively well excavated. Compared to the data available on settlement patterns, domestic architecture and other aspects of

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[44] I use the term 'fortifications' generically for various kinds of perimeter walls, bastions, ramparts, platforms, etc. No defensive of any other function is implied at this point.

material culture, the data on Gangetic fortifications are quite abundant. Scholars have previously analyzed some of these data, yet the method of these analyses was predominantly descriptive and typological (Erdosy 1987, Mate 1969-1970, T. N. Roy 1986, U. N. Roy 1954). In the Harappan Civilization, fortifications are also one of the most evident traits. Free-standing walls, platforms, and gates are present on many of the excavated sites. Judging from the lack of evidence for warfare, the function of these fortifications is quite intriguing. Moreover, not much research has been undertaken with the purpose of determining the role of these fortifications in the process of Harappan urbanization.

In contrast to fortifications, authority is difficult to trace in archaeological record. Fortifications are an objective structural feature whereas authority is a concept that needs to be shown theoretically through a combination of archaeological traits. Since the texts reviewed in this chapter are the products of several distinct ideologies, their views on authority vary. What unites these views is that authority – whether an individual ruler, a deity, or a group of governing officials – is seen as a distinct institution of power. This institution of power, i.e., a group of full-time specialists, is what can be shown archaeologically. Authority nonetheless takes different forms in different cultures. In some cultures, it is expressed in architecture and settlement layout. In other cultures, its presence is evident from burials or the objects of ritual paraphernalia. There are cultures, in which authority is barely distinguishable through material record. In sum, there is no universal archaeological signature of authority and whether architecture, settlement pattern, burials or some other traits of material culture can be used as evidence of authority must be decided on a site-by-site and culture-by-culture basis.

Many archaeologists who worked in South Asia at the turn of the twentieth century carried with them preconceived notions of authority from West Asian and European archaeology. They were eager to find palaces, rich burials and assembly halls. For example, Bloch (1904: 94) and Spooner (Spooner 1914: 99) saw the discovery of a palace as a major goal of their mission in Vaisali. Some scholars envisioned the 'pillared hall' at Kumrahar, Pataliputra, as the Mauryan assembly hall. In the Harappan Civilization, the lack of palaces and temples led researchers to the conclusion about the uniqueness of its sociopolitical order; Piggott saw the Harappan culture as static and monotonous (Piggott 1950), Fairservis characterized its sociopolitical organization as chiefdom (Fairservis 1967, 1975, 1992), and Possehl sees it as a unique previously unknown sociopolitical structure (Possehl 1998, 2002c).

To trace the emergence of authority on the Harappan and Gangetic sites, one needs to abandon any preconceived notions and to approach the existing data in its totality. *The emergence of authority then can be established by tracing drastic and simultaneous changes in the settlement size, layout and at least several aspects of material culture.* Archaeological records of both the Ganges and Harappan Civilizations offer a broad range of traits to be tested for such changes. Of course, the number and nature of these traits will vary depending on the quality, quantity, availability and credibility of archaeological data on each specific site.

To conclude, the concept of the city as a combination of fortifications and authority can be used as a hypothetical model for the analysis of the Gangetic and Harappan archaeology. The goal of this analysis is to determine whether this model

adequately reflects the phenomena of the Gangetic and Harappan city and whether it can reveal any previously unknown aspects of urban growth in ancient India.

Chapter 3. The City in the Ganges Civilization

> … the surviving ramparts represent the size of the cities from the time of their first construction, however much their superstructures may have been renewed in later times. It is our view that this major operation was, as far as any one thing can be, the hallmark of the emergence of a city, or city state.
>
> (F. R Allchin 1989: 14)

Introduction

In this chapter the archaeology of the Ganges Civilization is approached from the viewpoint of the model extracted from Sanskrit and Pali texts in the previous chapter. The goal is to determine whether the view of the city as a combination of fortifications and authority can be useful for the analysis of archeological data from the Ganges Civilization and whether this view is appropriate for the conceptualization of the Gangetic city. The analysis of data on fortifications is concerned with three issues: the date of initial construction, structural history and function. The analysis of data on authority is concerned with two issues: the date of emergence and function. The presence of authority is deduced through a combination of archaeological traits, such as settlement expansion, structural history, sphragistics, numismatics, figurines, pottery, weapons, iron tools and the like. The selection of traits on each site varies depending on the quality, quantity, availability and credibility of archaeological data.

In summary, this chapter presents a review and analysis of the available archaeological data on fortifications and authority from the thirteen selected sites.[45] As explained above, the sample of sites selected here for analysis includes: Ahicchatra, Atranjikhera, Bhita, Hastinapura, Kausambi, Mathura, Pataliputra, Rajghat, Rajgir, Sonpur, Sonkh, Sravasti, and Vaisali. This chapter ends with a general discussion on the idea of the city in the Ganges Civilization.

Ahicchatra

Reports and references: IAR 1963-64: 43-44; 1964-65: 39-42; V. S. Agrawala 1947-8, Vasudeva Sharana Agrawala 1985, Bajpai 1986, Dikshit 1952, Ghosh & Panigrahi 1946, Makkhan Lal 1986, Law 1942, Paul 1986, Sheo Bahadur Singh 1979.

Introductory remarks: Located near the town of Aonla in the Bareilly district of Uttar Pradesh, Ahicchatra covers an area of ca. 180 ha (see figure 4). As the capital of the North Panchalas, this site allegedly played an important role in the political history of ancient India. The excavations conducted at Ahicchatra nonetheless have been inadequate to reconfirm the significance and complexity of this site. Today, Ahicchatra is covered by agricultural fields making further excavations problematical.

After sporadic excavations by Cunningham and Fuhrer, K. N. Dikshit conducted the first extensive excavation of Ahicchatra in 1940-1944. Consequently, reports on pottery, terracottas and figurines were published in "Ancient India." Nine strata were identified as a result of this excavation (Ghosh & Panigrahi 1946).

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[45] The sites are reviewed in alphabetical order.

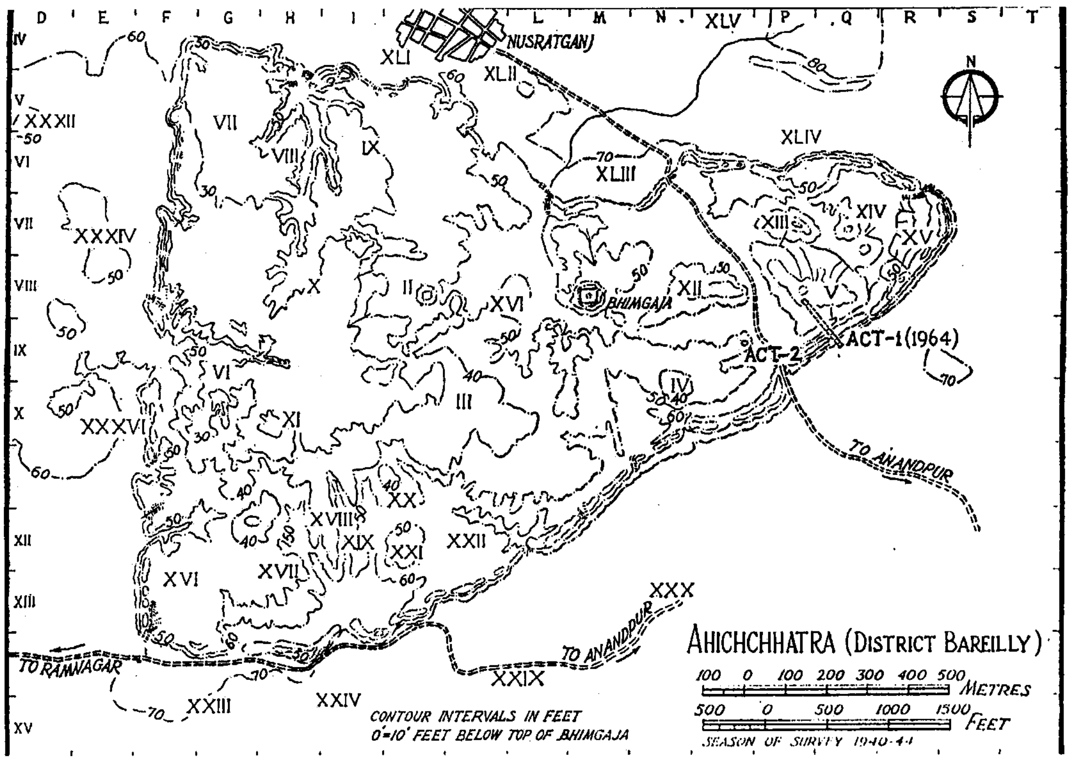


Figure 4: Contour Map of Ahicchatra (after IAR 1964-1965)

Stratum IX	before 300 BC, two pits cut into the natural soil;
Stratum VIII-VII	300 – 100 BC, remains of mud brick houses;
Stratum VI-V	100 BC – AD 100, first brick-built structures;
Stratum IV	AD100 – 350, described as "the most prosperous period of building activity in the city" (Ghosh & Panigrahi 1946).
Stratum III	AD 350 – 750, intensive structural activities;
Stratum II	AD 750 – 850: two small houses and a number of pits filled with ashes and potsherds;

Stratum I	AD 850 – 1110, blocks of houses separated from each other by streets and lanes.

In 1963-65, N. R. Banerjee under the aucpicies of the ASI conducted further excavations in Ahichchatra. The sequence defined as the result of this excavation was significantly different from that of Dikshit and Gonda. Its final revised version included four periods (IAR 64-65: 39-42)

Period I	OCW
Period II	PGW
Period III	NBPW
Period IV	The Kushan and Gupta periods

Fortifications: Ahicchatra has an impressive and well-preserved defense system. A high rampart, almost six km in circuit, revetted on the interior wall, encircles Ahicchatra from all the sides. A long partition wall running North South divides the site into eastern and western sectors. The western sector is smaller and appears to have been occupied significantly earlier. Except for a few brief reports that appeared in "Ancient India" and in the IAR, the results of the excavations conducted at this site by the ASI have never been published.

Both Dikshit and Banerjee investigated defenses. Under Dikshit's project, defenses were excavated in two places. Two successive earthern ramparts were established below the brick wall. Based on pottery found within the core of the rampart and in the soil below it, the excavators dated the construction of initial rampart to ca. 100 BC, i.e. to the advent of the Pancala rulers (Ghosh & Panigrahi 1946: 38). The ASI under Banerjee laid out a trench (ACT 1) across the defenses in the western sector (see figure

4). Based on the excavation of this trench, Banerjee defined five phases in the construction of defenses, all dated to Period IV, combining both the Kushana and Gupta Periods. During the first phase, the rampart was built of mud. During the second phase, the rampart was first damaged and then buttressed at its top by a brick wall, 4.98 m in width and 2.59 m in height. The wall ran through the entire length of the rampart. Interestingly, rectangular gaps, 2.13 by 1.32 m, were left in the wall at regular intervals; the openings were filled with rubble and clay. The excavators explained this by the desire to economize bricks (?). During the third phase, the brick wall was covered with mud. During the fourth phase, the wall was strengthened at intervals by packing. During the fifth phase, fragmentary walls of brick and brickbats were built inside the gaps in the outer wall (IAR 63-64: 44).

The construction of fortifications at Ahicchatra thus underwent several stages in its development. During the first stage, due to its vulnerability, the rampart was unlikely to have carried a defensive function; or defense was not its primary concern. The overall function of the partition wall is also quite ambiguous. Since the western sector was smaller and contained evidence for earlier occupations, it would be tempting to think that the partition wall marked the perimeter of the earlier site. However, this wall was built over architecture of the Gupta Period and consequently must have been built during the late Gupta or even post-Gupta time. The excavators proposed that the construction of the partition wall might have been due to "the excessive vulnerability" of the northeastern part of the fortified area where the habitation was concentrated during later periods (IAR 53-64: 44). Given the presence of the massive fortification around the whole city, this argument, in my opinion, is dubious. It is more likely that after the western sector had

been abandoned, the new wall marked the new city boundaries. In sum, whatever the actual function of the partition wall was, it is highly unlikely that its function was primarily defensive.

Authority: Dikshit and Ghosh correlated the construction of fortifications in Ahicchatra with the advent of the Pancala rulers around the first century BC. Stratigraphically, this corresponded to Strata VI, which was characterized by the first brick-built structures (Ghosh & Panigrahi 1946: 39) and some Pancala coins. Prior to Strata VI not much structural activity had been recorded. In Banerjee's chronology, the construction of fortifications was assigned to Period IV (originally, Period III), i.e., the time of the Kushanas and the Guptas. In association with this period, Banerjee recorded typically Kushana ware and copper coins of the Kushanas, Pancalas and Achyus. Prior to Period IV, the recorded structural activity was limited to postholes, mud-floors, ovens and burnt brick fragments. Period IV had numerous walls of burnt bricks and brickbats. Houses were aligned according to the cardinal directions. Besides structural activities, Period IV provided a large variety of artifacts, including coins, iron objects, figurines, beads, and so forth (IAR 1963-1964: 44). Overall, Strata VI/V of Dikshit's chronology and Period IV of Banerjee's chronology appear to mark a time of change in the sociopolitical life of Ahicchatra. Allegedly, this was the period when Ahicchatra became an important political center.

Atranjikhera

Reports and references: IAR 1960-61: 35; 1962-63: 34-36; 1963-64: 45-49; 1965-66: 44-47; 1967-1968: 45-46; 1968-69: 37-38; 1979-1980: 75-76; Gaur 1983.

Introductory remarks: Atranjikhera is a large site (ca. 1200 m by 400 m) located in the district Etah in Uttar Pradesh (see figure 5). A series of mounds lies on the western bank of the Kali Nadi, a tributary of the Ganges River, ten km from Mirahchi, a small town on the Etah-Kasganj road. R. C. Gaur excavated this site in 1962-1968. His excavations revealed continuous occupation from the beginning of the 2nd millennium BC to AD 1650. Gaur distinguished seven periods (Gaur 1983):

Period I	OCP
Period II	BRW, ca. 1450-1200
Period III	PGW, ca. 1200-600 BC
Period IV	NPBW, ca. 600-50 BC
Period V	ca. 50 BC – AD 350
Period VI	ca. AD 350 – AD 1100
Period VII	ca. AD 1100 – AD 1650

Today, Atranjikhera is in very good condition. It is not covered by agricultural fields and provides a great potential for future excavations.

Fortifications: On the surface, the defenses of Atranjikhera are not as noticeable as the defenses of some other Gangetic sites. Yet, as established by Gaur, like many other Gangetic sites Atranjikhera had a rampart with a parapet wall on top of it. Gaur defined four structural sub-phases for the rampart. All of these sub-phases belong to Period IV which in turn is divided into four phases (see table 4) (Gaur 1983: 6-10):

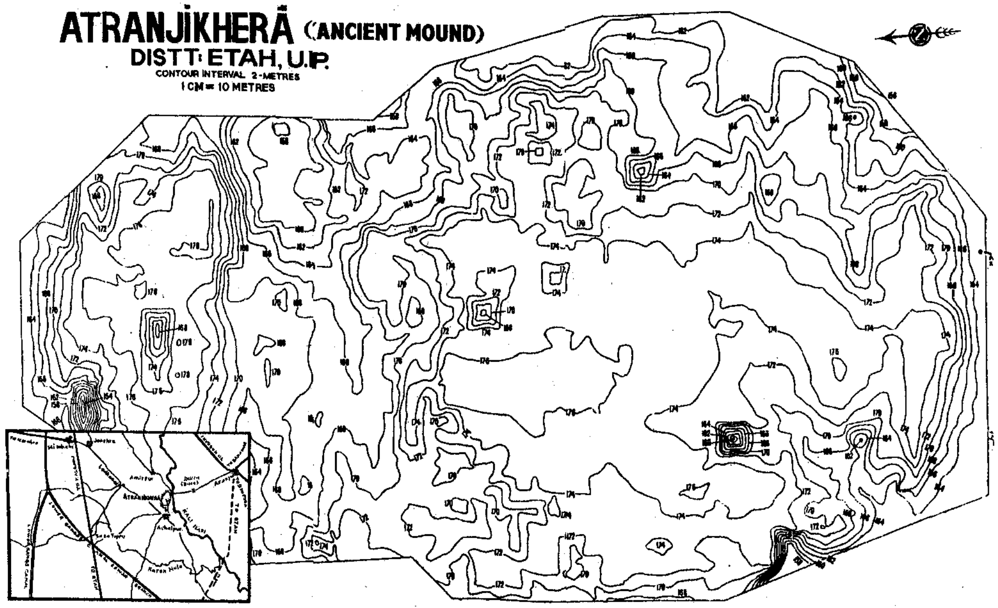


Figure 5: Contour Map of Atrnajikhera (after Gaur1983)

The construction of the first rampart belongs to Period IVB that dates to ca 500-350 BC (Gaur 1983: 254-256). Gaur calls this rampart a "mud-bund" and describes it as a "massive clay deposit laid in slope after the great flood" (Gaur 1983: 254). The width of this rampart at its base is estimated to be approximately 30 m. During Sub-Phase 2, the existing "bund is extended to surround the whole town as a rampart" (Gaur 1983: 255). Sub-Phase 3 is a period of several structural changes. The rampart is strengthened and raised. A tower-like circular structure with a diameter of 4.5 meters is built at the top of the rampart in the southwest corner of C1 trench. Two successive mud-brick walls are attached to this structure. During Sub-Phase 4, the tower is renovated and its height is raised. A flank-wall on the northern side of the tower is built, and the height of the rampart is raised. Finally, parapet walls with gaps at regular intervals are built on the top

Table 4: Phases of the Rampart and Period IV at Atranjikhera (after Gaur 1983)

	Period Phases	Rampart Sub-Phases	Dates in BC
Period IV	Phase A		600 – 500
	Phase B	Sub-Phase 1	500 – 350
	Phase C	Sub-Phase 2	350 – 200
	Phase D	Sub-Phase 3 Sub-Phase 4	200 – 50

of the rampart. The maximum height of the parapet wall is traced up to thirteen courses of bricks, i.e. 3.7 meters. The maximum height of the rampart is 3.05 meters.

With regard to the function of the rampart, Gaur emphasizes the role of floods. Phases IVA and IVB allegedly end in floods and destruction. Consequently, Gaur explains the construction of both the mud bund and the encircling rampart as a protective measure against floods. I believe this explanation is a bit simplistic. If the sole cause beyond the construction of the rampart had been the protection against floods, there would have been no need to build towers and a parapet wall on top of the rampart. Military defense does not seem to explain the functionality of the rampart either. On one hand, Period IV provides some evidence for warfare; most of the arrowheads, spearheads and spear shafts come from the deposits of Period III and IV (see table 5). On the other hand, the rampart, being low and gradually sloping, is unlikely to provide sufficient protection from a military attack at least until the parapet wall is built. The function of the rampart at Atranjikhera thus remains an open question. What one can say at this point is

that non-utilitarian and symbolic explanations seem to be more in line with the data than military defense or protection from floods.

Authority: Transition from Period III (PGW) to Period IV (NBPW) marks several drastic changes in the life of Atranjikhera:

1. The settlement expands in size: During Period III, Atranjikhera was small. Gaur excavated several exploratory trenches with the sole purpose of finding out the size of the settlement in Period III. He discovered that until the end of Period III, the settlement had been confined to the eastern part of the mound. Occupation in the rest of the mound began during the first phase of Period IV (IAR 1967-68: 45-46; IAR 1968-1969: 37-38).

2. Architecture becomes more complex: Wattle-and-daub structures give way to structures made of mud and burnt brick. Although Gaur did not expose any large horizontal areas – his focus was predominantly on defining a cultural sequence by excavating deep soundings – he nonetheless collected enough data to give a sense of changes. Period III lacked evidence of significant structural activities and it was unlikely that this was the result of a limited scale of excavations. The size of trenches laid out at Atranjikhera was big enough to detect structural activities if there were any. Period IV, on the contrary, witnessed a significant intensification of structural activities. In this respect, Phase C, which immediately followed the construction of the earliest mud bund, was particularly important. In the context of this phase, Gaur identified numerous mud-brick walls, ring-wells, barns, granary, kitchens and rooms (Gaur 1983: 249). Regardless of whether Gaur's identifications of structures were accurate, one thing was clear: the first evidence for active structural activity came from Period IV.C, to ca. 350-300 BC.

Table 5: Weapons in Atranjikhera (after Gaur 1983)

	Period III	Period IV			
	All Phases	A	B	C	D
Bone arrowheads	53	68	40	9	15
Iron arrowheads	21	10	9	8	3
Iron spearheads	8	16	6	8	3
Iron shafts	5	3	1	1	0

3. A system of coinage emerges: Twenty-three coins were attributed to Period IV. Thirteen coins were discovered in a well-stratified context. Gaur classified the coins into three groups: punch-marked, uninscribed, and inscribed (Gaur 1983: 447-452).

4. Sealings appear: The total of three sealings were discovered in the deposits of Period IV: two in terracotta and one in bone (Gaur 1983: 452).

5. Agricultural tools made of iron appear: In the deposits of Period IV, Gaur identified five types of agricultural tools made of iron: sickles, spuds, ploughshares, hoes, and diggers (Gaur 1983: 427-431).

6. Human terracotta figurines appear: The total of 21 human (Gaur 1983: 362-363) and 37 animal figurines (Gaur 1983: 366-372) were discovered in the deposits of Period IV.

7. There is a noticeable increase in the amount of unearthed weapons (see table 5). Interestingly enough, the largest number of arrowheads comes from Period IV.A and Period IV.B, the time immediately preceding the construction of the first rampart.

As evidence for authority, all these changes are of different value. Period IV lasted for almost 600 years. Consequently, it is important to know in which phases the changes took place. Unfortunately, as many finds and features were poorly stratified, some changes were roughly ascribed to Period IV. For example, human figurines emerged for the first time during Period IV, yet Gaur did not specify during which phase of Period IV the figurines emerged. Nonetheless, based on the changes that were dated more credibly – settlement size, architecture, pottery, weapons and coins – one must conclude that Phases IVB and IVC marked a period of very important changes in the life of ancient Atranjikhera. In my view, these changes would have been impossible without the emergence of a strong authority on the site of Atranjikhera.

Bhita

Reports and references: IAR 1995-1996: 74-75; Marshall 1915a.

Introductory remarks: Bhita is located near Allahabad, downstream from Kausambi. John Marshall excavated this site in 1909-1912 (see figure 6). During his excavation, Marshall exposed a large area in the southeastern part of the city, which provided evidence for occupation from the Mauryan to Gupta periods. Given the methods employed by British archaeologists in the beginning of the twentieth century, Marshall did not define a consistent chronology for Bhita. Nonetheless, judging from his report, he excavated stratigraphically and on several occasions defined sequences of strata. For example, based on the excavation of the house and shop of Nagadeva (Buildings 12 and

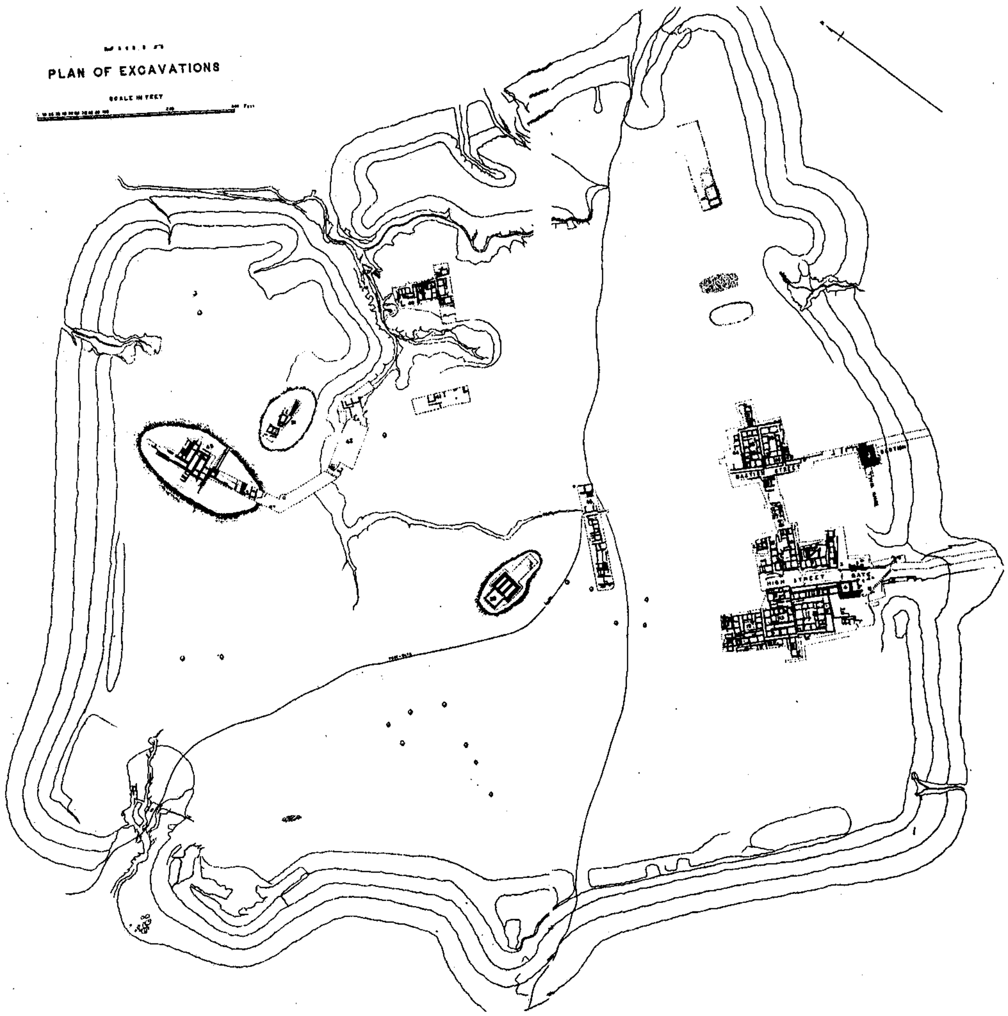


Figure 6: Plan of Bhita (after Marshal 1915)

13) located among the group of structures near the gate in the southeastern part of Bhita (see figure 7), Marshall defined five consequent strata (Marshall 1915a: 33-35).

Stratum I pre-Mauryan, no structural activities

Stratum II	Mauryan, first architectural features
Stratum III	ca 1st century BC: the foundation of the house; terracotta figurines; pottery.
Stratum IV	Kushana Period: defined by the floor of the house
Stratum V	ca 3rd century AD, defined by a floor in the house.

Later, Marshall reconfirmed this sequence in the excavations of another structure, the house of Jayavasudha. As far as the earliest occupation at Bhita is concerned, Marshall argued that the lowest floor reached in the trench between the buildings 12 and 22 dated to or before 800 BC. On one occasion, Marshall also mentioned the discovery of Neolithic artifacts. Later investigations reconfirmed and developed Marshall's chronology. First, when the Northern Black Polished Ware was defined it became clear that Bhita had a significant NBPW presence (Ghosh & Panigrahi 1946). Second, in the early 1990s, the Lucknow circle of the ASI under G. T. Shendey conducted a small-scale excavation on the Garh, a fortified mound at Bhita. It was established that the earliest occupation had "a thin deposit (20 cm) of black-slipped ware" dated roughly to the 8th – 7th centuries BC (IAR 1995-1996: 74). The next deposit was represented by the NBPW and the excavators dated it to the 7th – 2nd centuries BC. The uppermost deposit, according to the excavators, belonged to the Sunga period. The deposits of the Kushana period were discovered on the Garh mound.

Today, Bhita is in very good condition and is protected by the ASI. Due to of its size, location and long occupational history, Bhita remains a very important site.

Fortifications: J. Marshall spotted the remains of fortifications in the southeastern section of Bhita and traced them for a length of forty feet at the southeast end of Bastion

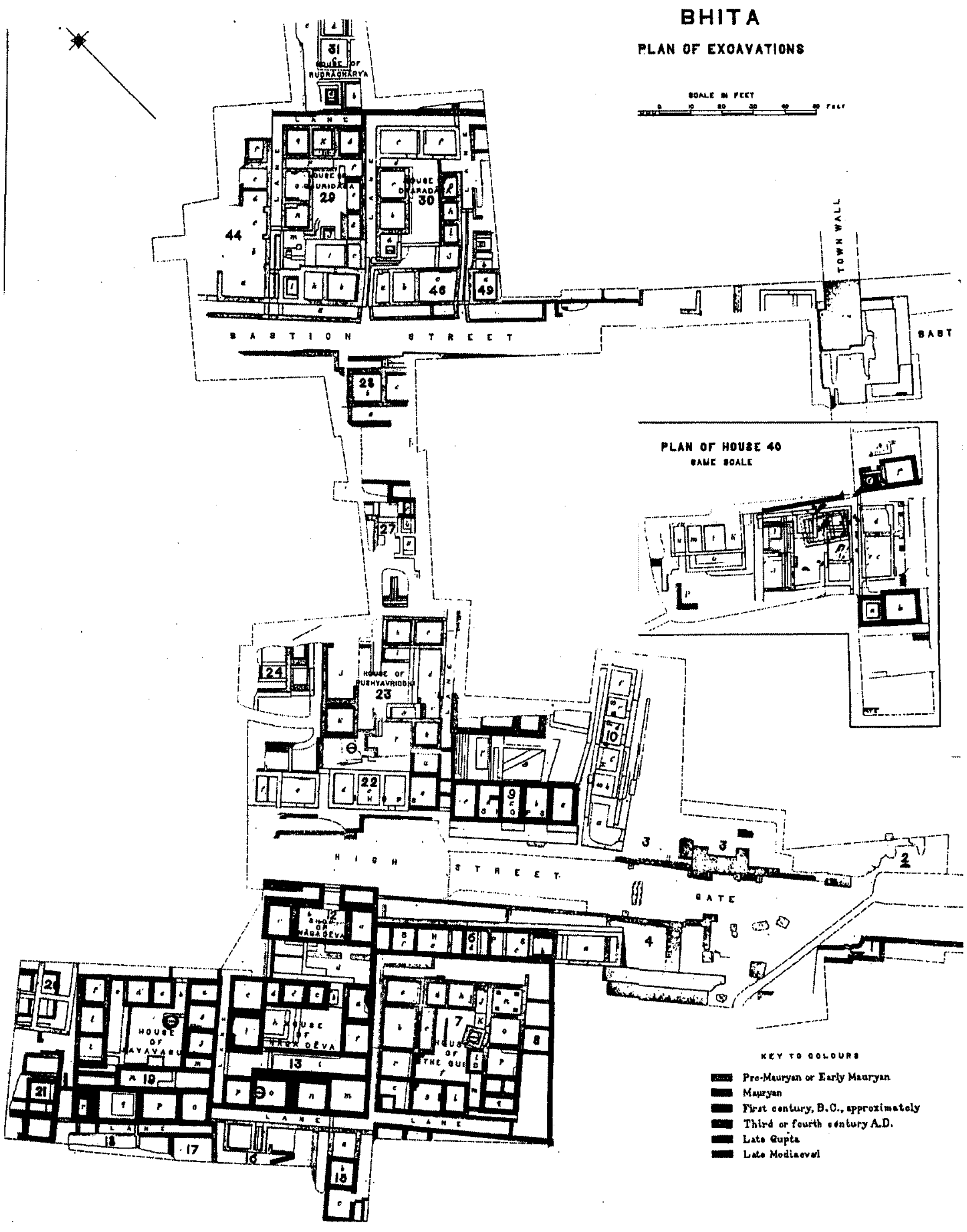


Figure 7: Bhita, Plan of Excavations (after Marshall 1915)

Street. The discovered remains consisted of an earthen rampart, an eleven feet thick wall on top of the rampart, and a quadrangular bastion projecting fifteen feet from the outer side of the wall. Marshall suggested that the wall was built during the early Mauryan or pre-Mauryan periods and was pierced originally by a gateway. The bastion, according to Marshall, was built during the Mauryan period in order to strengthen the wall. The wall in its turn was strengthened by a casing four feet in thickness (Marshall 1915a: 40). It is not clear what exactly Marshall meant by 'casing,' yet based on analogy with other sites it is likely that the wall was plastered.

As mentioned above, the team of the Lucknow circle of the ASI under the directorship of G. T. Shendey established that occupation in Bhita started with the black-slipped ware and continued through the NBPW to the Sunga and Kushana periods (IAR 1995-1996: 74-75). Structural activities and the expansion of the settlement seem to have begun with the NBPW period, since no structures were discovered in association with the deposits of the Black-Slipped Ware period. Considering this information as well as Marshall's description of fortifications, it is tempting to suggest that the initial rampart was built in Bhita at the beginning of the NBPW periods. Later, during the Mauryan period, it was reinforced by parapet walls and bastions. Such structural history would follow a pattern observed in several other sites of the Ganges Civilization. In addition, fortifications divide Bhita into two parts: Garha, the fortified mound, and Garhi, the lower mound outside the fortified area (IAR 95-96: 74). It is not clear whether this layout was confirmed by excavations or was assumed based on a surface survey and general observations. If Bhita indeed consisted of the fortified and non-fortified parts of town,

this would be an interesting and rare case of planning for an early historical site in the Gangetic Doab.

As far as the function is concerned, Marshall does not provide any explanations. Given the lack of credible chronology and structural history, it is difficult to reassess his data. What one can say at this point is that by the Mauryan period the size and complexity of fortifications at Bhita exceeded the needs (if any) to protect the site from floods. Moreover, if the division of Bhita into the fortified mound and the lower mound is correct, then the fortifications at Bhita must have performed a segregative function. Most importantly however, in shape and design fortifications at Bhita are similar to those of Ahicchatra, Atranjikhera, Sravasti and some other Gangetic sites. Therefore it is not unreasonable to assume that the function was also somewhat similar.

Authority: Bhita is one of a few sites of the Ganges Civilization excavated on a very large horizontal scale. Near the city-gate in the southeastern part of Bhita, Marshall unearthed the whole district with several streets and numerous houses (see figure 7). The discovered architectural features, seals and sealings, terracotta objects, and coins provide much evidence for the presence of authority.

By the beginning of the Mauryan period, Bhita must have been an important local center. That the site was big is clear from the Mauryan deposits discovered by Marshall in several remote trenches, such as trench 40 in the northeastern side of town, several trenches near the southeastern gate, etc. Most structures assigned by Marshall to the Mauryan period were quite imposing. Building 7, or as Marshall called it 'The House of the Guild', is one of the largest and most interesting structures on the site. It consists of a rectangular courtyard surrounded by twelve rooms on four sides (Marshall 1915a: 30-31).

A row of rectangular rooms in front of it, 'the shops' according to Marshall's interpretation, face 'High Street' that runs from the southeastern gate inside the city. Buildings 3 and 4, which face each other on the opposite sides of the southeastern end of 'High Street', are also quite interesting. Marshall suggested that these two buildings were either guardhouses or were somehow functionally connected with the defenses (Marshall 1915a: 30). Indeed they are located right next to the southeastern gate and are very different from other houses on High Street. Some Mauryan structures must have been rebuilt during later periods. For example, the 'House of Pushyavriddhi', building 23, located on 'High Street' across from the 'House of the Guild' has Mauryan portions. The house of Nagadeva, building 13, located next to the 'House of the Guild' also on 'High Street,' has Mauryan remains underneath its foundation (Marshall 1915a: 35-36). Near the northeastern side of town, a thick layer of Mauryan occupation was detected in Trench 40. Architectural remains of this layer were standing to a height of 8'8'' including house foundations, walls of baked brick and floors laid with brick, earth and concrete (Marshall 1915a: 40-41). Finally, the Mauryan debris composed of burnt bricks and brickbats were unearthed in a pit dug underneath High Street between the shops of Nagadeva (Building 12) and the shops of Pushyavriddhi (Building 22).

Seals and sealings constitute an important portion of finds recorded by Marshall at Bhita. A total of 210 seals and sealings comprising 120 varieties and 67 duplicates were found. Although most of the discovered seals and sealings date to the Kushana or Gupta periods, there are also seals of the earlier periods. Some of these seals are quite interesting (Marshall 1915a: 44-61). For example, seal 1 found underneath the walls of the House of the Guild, judging from both language and stratigraphy, dates to around the

3rd century BC. The seal is inscribed with the words 'sahijitiye nigamasa'. The meaning of the word *nigama* is debatable. It has been translated as 'a city', 'a village' or even 'a corporation, guild'. The discovery of this seal led Marshall to call Building 7 'the House of the Guild', since he assumed that the seal might have marked the "site of the office of a *nigama* or corporation" (Marshall 1915a: 47). Regardless of whether Marshall was right in his interpretation, the use of the term *nigama* on a seal that dates around 3rd century BC is quite interesting. Whether it designates a type of settlement or a governing body, it points to the presence of authority on the site.

In summary, architecture, seals and other artifacts point to the definite presence of authority at Bhita by the beginning of the Mauryan Period. For the emergence of authority however, the most interesting period must be the one that immediately preceded the Mauryas. Unfortunately, owing to the lack of dating techniques at the time of excavation and the emphasis, which the excavator seemed to have placed on the Mauryan and post-Mauryan periods, many finds and architectural features of the earlier periods were poorly stratified and not given sufficient attention. On one occasion, Marshall mentions architectural remains of the pre-Mauryan period in Trench 40. Allegedly, they consisted of 'two walls of *pakka* brick' and 'the foundations of the chamber' (Marshall 1915a: 41). The earliest baked bricks were found in the pit dug underneath High Street. Marshall dated them to the 4th – 5th century BC. Also, the later excavations established that the NBPW, not defined as an important pottery type at the time of Marshall, was present in Bhita in large amounts. In size, the pre-Mauryan settlement was quite large; both Marshall and Shende found pre-Mauryan deposits in the remote parts of the site.

Considering all this information, it seems reasonable to suggest that Bhita had become an important settlement prior to the Mauryan period. In a similar way, the process of the emergence of authority must have taken several hundred years prior to the third century BC. One hopes that further excavations will clarify this.

Hastinapura

Reports and references: Gordon 1957, B. B. Lal 1954-1955, Makkhan Lal 1986.

Introductory remarks: Hastinapura is often seen as type-site of the Ganges Civilization (see figure 8). It is located in the District Meerut near the town of Mawana, on the right bank of an old bed of the Ganges River. Being the capital of the Kurus, Hastinapura plays a very prominent role in the Mahabharata. It is also mentioned in the various texts of the Jaina and Puranic literature. B. B. Lal excavated at Hastinapura in 1950-1952 and consequently published a report in 'Ancient India 1954-1955'.

The cultural sequence of Hastinapura consists of five periods covering almost three thousand years, from the late second millennium BC to the middle of the second millennium AD. Each of these periods is defined by a distinctive pottery type: the Ochre Colored Ware (OCW), the Painted Grey Ware (PGW), the Northern Black Polished Ware (NBPW), the Red Ware (RW), and the pre-Mughal Glazed Ware (PMGW). Each of the five periods ends in the abandonment of the site (see figure 9).

Period I (OCP)	before 1200 BC
Period II (PGW)	1100 – 800 BC
Period III (NBPW)	600 – 300 BC

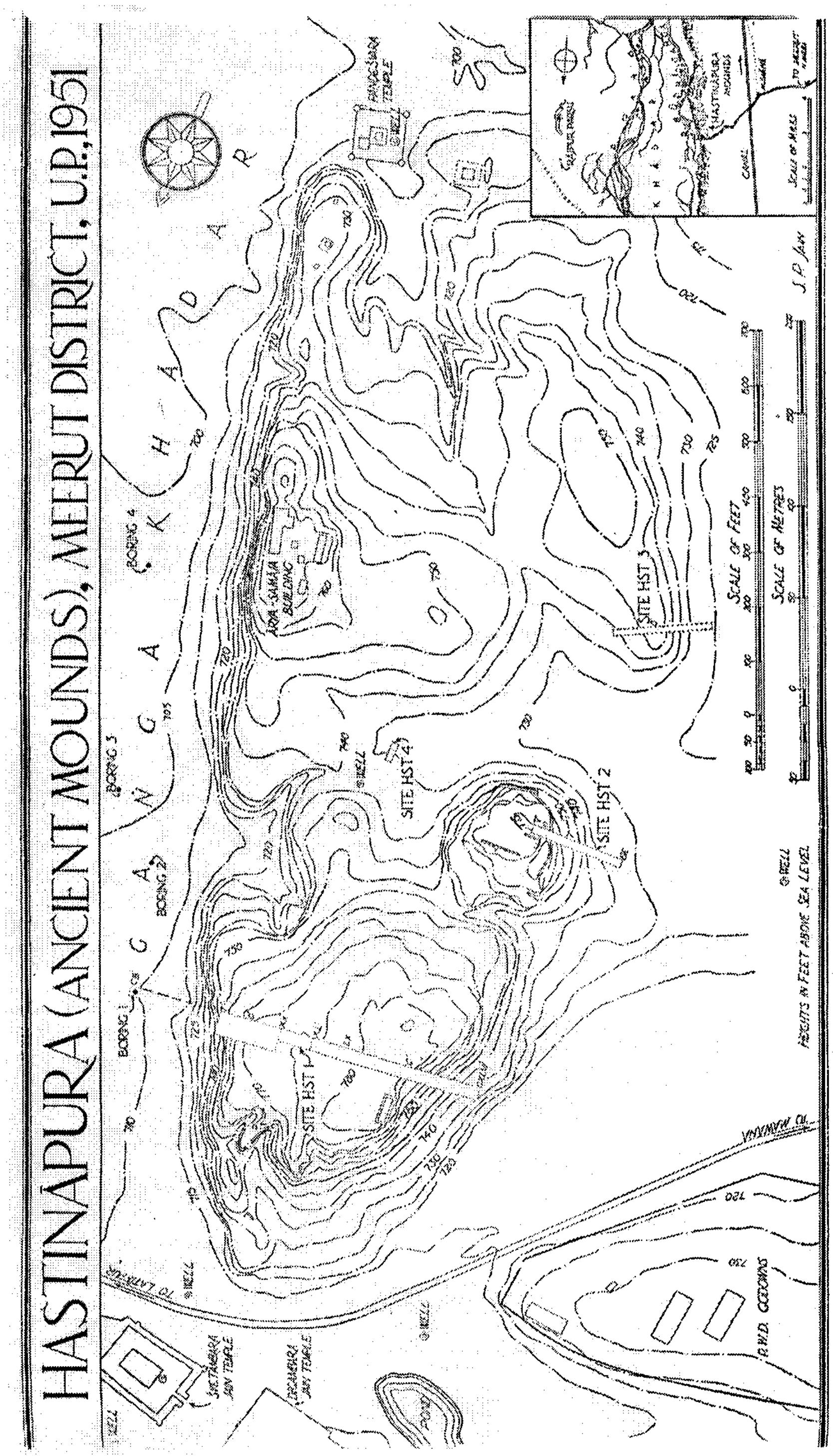


Figure 8: Hastinapura (after Lal 1954-55)

Period IV (Red Ware, Sunga-Kushana Period)	200 BC – AD 300
Period V (Glazed Ware)	AD 1100-1500

Excavation at Hastinapura was a pioneering project that, in many respects, laid the foundations for the study of the Ganges Civilization. Based on this excavation, Lal introduced and defined the concept of the Painted Grey Ware (PGW), which he thought should have been used as a cultural label. Lal hypothesized that the distribution of the PGW may have reflected the movement of the "Aryan-speaking people". Currently, Hastinapura is under the protection of the ASI and provides a good potential for further excavations.

Fortifications: Lal did not report any fortifications at Hastinapura. Out of the four trenches that he excavated, HST 1 was the largest and most informative. Its total length was 590 feet and its width varied from 44 to 21 feet. The trench cut all the way from east to west across the main mound (see figure 10). Given this, one would expect that if a wall or a rampart had surrounded the mound, the excavator would have certainly hit it. Three scenarios are possible here:

1. Parts of fortifications were eroded or destroyed due to floods, conflagrations or other calamities. Indeed, every period defined by Lal ended with the abandonment of the site. The PGW ended with the heavy flood that washed away a considerable portion of settlement. The NBPW ended in a large-scale conflagration and a hundred years long break in occupation. After the Sunga-Kushana period, the site was deserted for almost eight hundred years. In addition, Lal reported that on the eastern, widest, end of HST 1, there was a very deep and wide rain gully. This might have significantly confused the

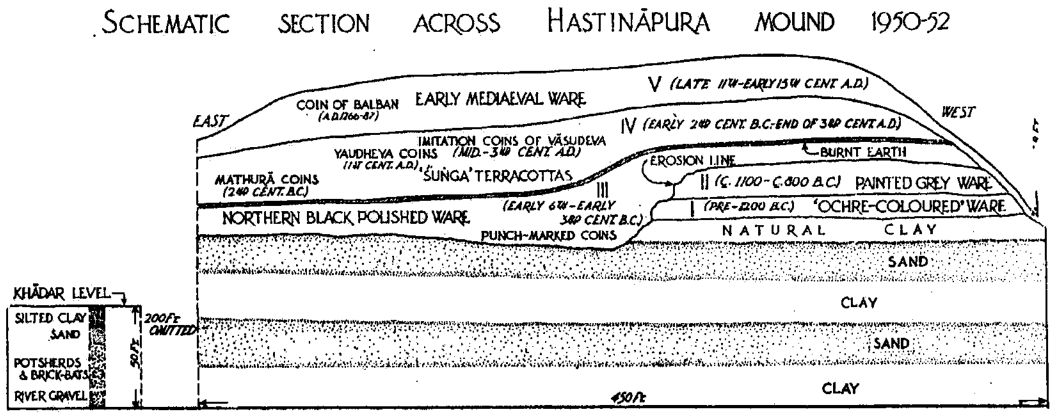


Figure 9: Cultural sequence of Hastinapura (after Lal 1954-1955)

uncovering of the remains of fortifications. Also, the width of HST 1 might have been insufficient for finding fortifications.

2. The excavators missed fortifications. The analysis of some architectural features by Lal is not always clear. The function of the wall 86 located in the western end of the HST 1 (see figure 10) and assigned by Lal to the Period V could have been misunderstood (B. B. Lal 1954-1955: 27).

3. Hastinapura was never fortified.

In my view, the last scenario is the most likely one. The ensuing analysis of archaeological data on authority seems to support it quite convincingly.

Authority: Given the role assigned to Hastinapura in the Mahabharata, one would expect the archaeological evidence for authority to have appeared in Hastinapura by Period III, the NBPW. The archaeological record nevertheless reveals the opposite.

Settlement size: The size of Hastinapura is an interesting issue. The deposits of the OCP, PGW, NBPW and the Sunga-Kushana periods were traced only in Trenches 1

and 2, both located on the main mound. Judging from Lal's map, the size of this mound is about 2 hectares (see figure 8). Trenches 3 and 4 excavated on the adjacent mounds revealed the remains of period V that starts, according to Lal, around AD 1100! If the results of Lal's excavations are taken as representative for the rest of the site, Hastinapura must have been quite a small settlement until the twelve century AD.

Architecture: The deposits of Period II revealed no house plans. Fragmentary remains of mud-brick walls were encountered. Lal suggested that the presence of mud-plaster with reed impressions indicated that some houses might have had reed walling. The use of baked bricks during this period is dubious since only a fragment of a baked brick was reported from one of the pits (B. B. Lal 1954-1955: 13). The deposits of Period III did not reveal house plans either. A number of mud, mud-brick and burnt-brick walls were encountered. Two burnt-brick drains and several terracotta ring-wells were found as well. In trench 1, three structural sub-periods were defined (B. B. Lal 1954-1955: 15-16). Period IV marked a significant proliferation in structural activities. Walls and floors were made of burnt bricks. A section of a 16-ft wide street with houses on either side was detected. Although no complete house plans were obtained; rooms, walls, floors, doorways and platforms give a good sense of structural activity during this period. Seven structural sub-periods were defined. Based on the orientation of some walls, Lal argued that houses were constructed in accordance with cardinal directions.

Pottery: As noted above, each of the five cultural periods at Hastinapura is defined by one distinctive pottery type. Other pottery types are either given little attention or completely disregarded. For example, no ratio between the PGW and other wares is provided in the context of Period II. Only 101 (!) NBPW sherds are reported from the

deposits of Period III. Most of these sherds come from the lower levels and only ten sherds (!) are indicative of shapes (B. B. Lal 1954-1955: 52). Briefly mentioning other wares of Period III, Lal does not specify their types and amounts. Instead, he treats the NBPW as a chronological and cultural marker of the period that lasted for over four hundred years. Given this, it is basically impossible to determine changes in pottery production that took place between Periods II and III. The pottery of Period IV seems to be characterized by a higher degree of standardization and mass production. All pottery of this period is wheel-made, mostly unpainted and is entirely of red ware.

Figurines: Of the thirty-nine recorded human figurines, only four were discovered in the deposits of Period III. Most of the human figurines were attributed to Period IV. Out of one hundred and five recorded animal figurines, most came from Period V. Only three figurines were attributed to Period II. It is not clear what the exact ratio between the figurines of Periods III and IV was. Yet according to the illustrated examples, as compared to the preceding periods Period IV provided the largest and most diversified collection of animal figurines (B. B. Lal 1954-1955: 85-87).

Coins: Of the eighty-five discovered coins, most were discovered in the deposits of Period IV. The deposits of Period III revealed a number of punch-marked and uninscribed coins (B. B. Lal 1954-1955: 101-105).

Another archaeological factor important for verifying the presence of authority at Hastinapura is the lack of seals, weaponry and inscribed objects. Lal seemed to believe that these artifacts were not discovered due to excavation techniques, i.e. focus on vertical soundings and the lack of horizontal exposures; he did not even consider the possibility of Hastinapura simply not having these types of artifacts. In my view, given

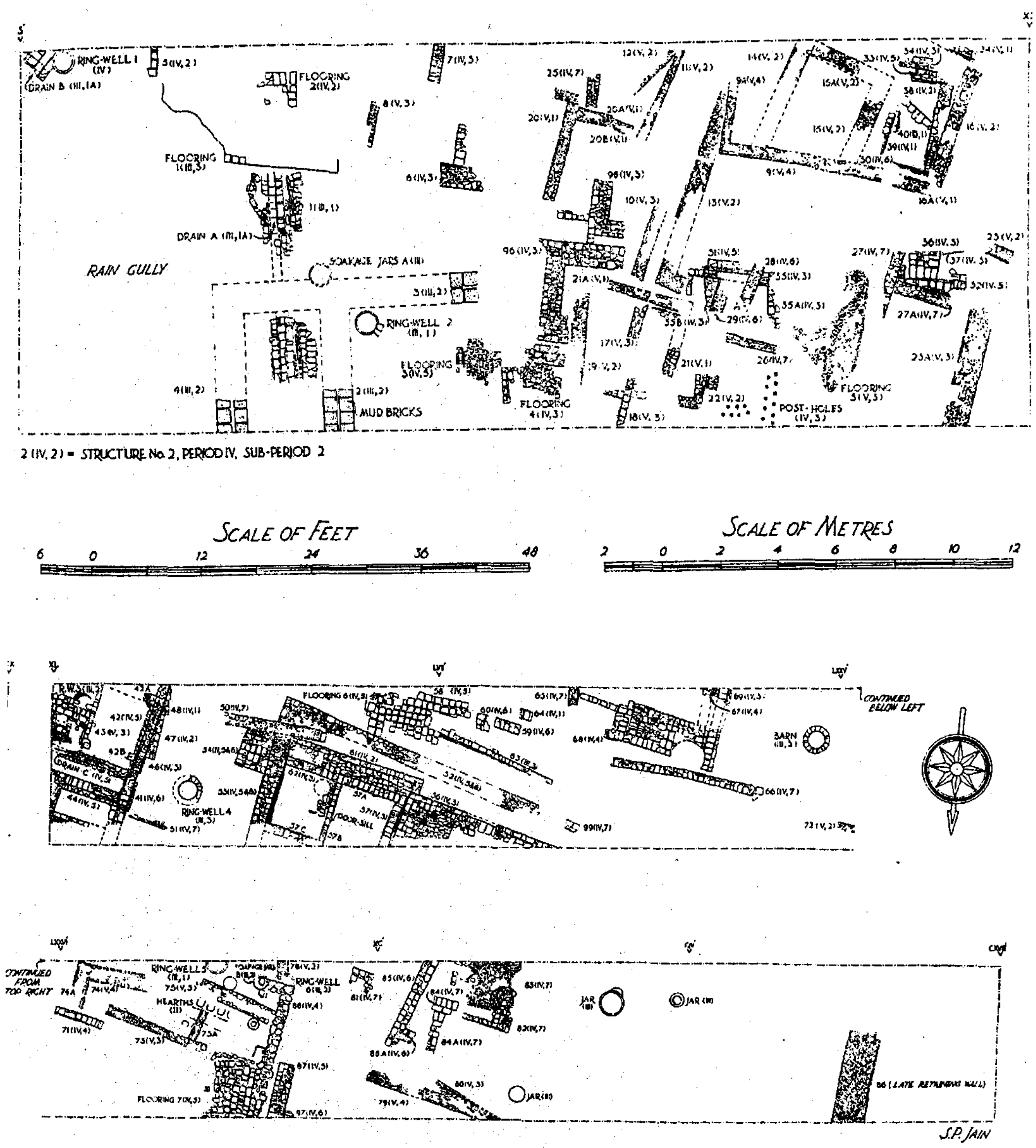


Figure 10: Hastinapura, Trench HST 1 (after Lal 1954-1955)

the size and location of trenches HST 1 and HST 2 (see figures 8, 10), there is absolutely no reason to treat the results of Hastinapura excavations as deficient. That the seals and inscribed objects were lacking in the deposits of all the periods and structural activities

had been minimal until Period IV must have been the result of sociopolitical organization and complexity of Hastinapura rather than of Lal's excavation methods.

To conclude, the existing archaeological data does not seem to support the presence of strong authority in Hastinapura at least until Period IV. Settlement size, the nature of architecture, coins as well as the lack of seals, weaponry and inscribed objects indicate quite a modest nature of settlement in ancient Hastinapura. This however does not exclude a religious or ritual significance, which is difficult to trace archaeologically.

Kausambi

Reports and references: IAR 1953-1954: 9; 1954-1955: 16,18; 1955-1956: 20-22; 1956-1957: 28-29; 1957-1958: 47-49; 1958-1959: 46-47; 1959-1960: 46; 1960-1961: 33-35; 1961-1962: 50-52; 1962-1963: 32-33; 1963-1964: 40; 1966-1967: 38-39; Erdosy 1984, Ghosh 1935, 1985, B. B. Lal 1979-1980, 1985b, c, Law 1939, Mate 1969-1970, G. R. Sharma 1960, 1969, Shastri 1979, Sinha 1973.

Introductory remarks: Kausambi is one the largest and most important early historical sites in northern South Asia. Located near Allahabad, on the left bank of the Yamuna River, it is spread over eight square miles and is enclosed by a chain of well-preserved massive ramparts (see figure 11). According to literary sources, Kausambi was the capital of the Janapada of the Vatsas and played an important role in the early history of northern South Asia. Cunningham was the first to recognize the importance of Kausambi in the second half of the 19th century. Majumdar conducted a small-scale excavation in Kausambi near the Asokan pillar in 1937-1938. Unfortunately, the results of this excavation were not published. G. R. Sharma undertook a major archaeological

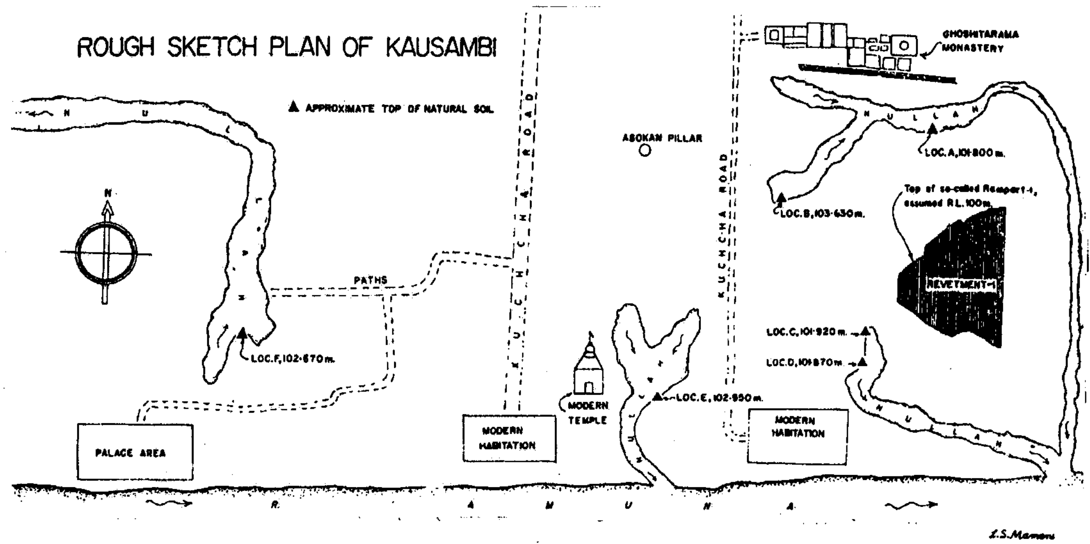


Figure 11: Approximate plan of Kausambi (after B. B. Lal 1979-1980)

project in Kausambi in 1949-1967. He excavated in four areas: near the Asokan pillar in 1949-1950, in the Ghoshitarama monastery in 1950-1956, in the area of defenses in 1957-59, and in the area of the so-called palace in 1960-1967. All of these four projects produced large amounts of archaeological data. The results of the excavation near the Asokan pillar and at the defense complex were published in two separate monographs (G. R. Sharma 1960, 1969). The results of the excavation at the Ghoshitarama monastery and in the palace can be found in brief reports of the IAR.

Today, agricultural fields and villages cover a significant portion of Kausambi making further excavations nearly impossible.

Kausambi is notoriously known for its chronology. Based mostly on the stratigraphy of defenses, Sharma distinguished four cultural periods, covering a span of time from 1165 BC to AD 580 (see figures 12, 13) (G. R. Sharma 1960):

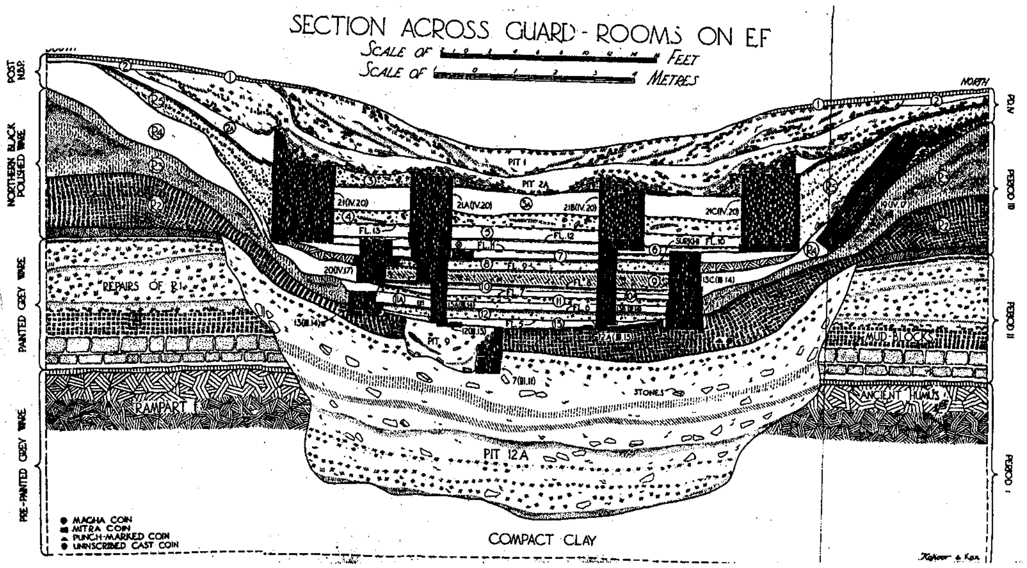


Figure 12: Section across the Guardrooms of EF (after G. R. Sharma 1960)

Period I (structural periods 1-4)	OCW, Rampart 1165-885 BC
Period II (structural periods 5-8)	PGW, BRW 885-605 BC
Period III (structural periods 9-16)	PGW, NBPW, BRW 605-45 BC
Period IV(structural periods 17-25)	Palace complex 55 BC - 580 AD

In addition to these periods, Sharma defined a number of structural sub-periods, each characterized by a set of construction activities and renovations in the defense complex. Dates for Periods III and IV were based on coins, seals, terracotta figurines and arrowheads. The earlier periods were dated by conjecture. Sharma simply assumed that structural periods associated with Ramparts 2 and 1 had the same average span of life – seventy-five years – as the structural periods associated with Ramparts 3, 4 and 5.

KAUSĀMBĪ, 1949-50
CHRONOLOGICAL TABLE
OF
PERIODS AND SUB-PERIODS OF HABITATIONS IN KS-I AND KS-III

DATES	PERIODS	STRUCTURAL SUB-PERIODS		ROAD-PHASES	LAYERS	COINS	POTTERY
400					1	GANENDRA (GANAPATINĀGA)	LATER WARES
	PERIOD III	S.-P VIII	BRICK STRUCTURES	VIII	1A	PUŚVASRĪ MAGHAS	LATER WARES
200	PERIOD III	S.-P.VII	BRICK STRUCTURES	VII	2		LATER WARES
	PERIOD III	S.-P.VI	BRICK STRUCTURES	VI	3	MAGHAS NEVA KUSHAN	LATER WARES
	PERIOD III	S.-P.V	BRICK STRUCTURES	V	4 5	RAJANIMITRA	LATER WARES
A.D. B.C.	PERIOD III	S.-P.IV	BRICK STRUCTURES	IV	6 7	PRAJĀPATIMITRA SŪRAMITRA BRIHASPATIMITRA II	LATER WARES
	PERIOD III	S.-P.III	BRICK STRUCTURES	III	8		LATER WARES
200	PERIOD II	S.-P.II	BRICK STRUCTURES	REPAIRS	9		NORTHERN BLACK POLISHED WARE
	PERIOD II	S.-P.IB	BRICK STRUCTURES	II	10 11	LANKY BULL	NORTHERN BLACK POLISHED WARE
	PERIOD II	S.-P.IA	BRICK STRUCTURES	I	12	UNINSCRIBED CAST COINS	NORTHERN BLACK POLISHED WARE
400	PERIOD II	P.-S.V	PRE-BRICK STRUCTURES		13		NORTHERN BLACK POLISHED WARE
	PERIOD II	P.-S.IV	PRE-BRICK STRUCTURES		14		NORTHERN BLACK POLISHED WARE
	PERIOD II	P.-S.III	PRE-BRICK STRUCTURES		15		NORTHERN BLACK POLISHED WARE
	PERIOD II	P-S.II	PRE-BRICK STRUCTURES		16		NORTHERN BLACK POLISHED WARE
600	PERIOD II	P.-S.I	PRE-BRICK STRUCTURES				NORTHERN BLACK POLISHED WARE
800					17 TO 23	BARREN DEPOSIT	
1000	PERIOD I				24 TO 27		GREY WARE

Figure 13: Structural sequence of Kausambi (after G. R. Sharma 1960)

Consequently, he came up with exact dates for each structural period. For example, Period SP I.3 defined by the construction of the first rampart and the plastered revetment was dated precisely to 1025 BC – 955 BC (G. R. Sharma 1960: 22)!

Understandably, scholars have criticized Sharma's dating and identification of architectural features (Erdosy 1987: 3-6, 1988: 51-55, 59-61, Ghosh 1973, B. B. Lal 1979-1980, Sinha 1973). Lal, for example, argued that rampart 1 was "natural soil" and revetment 1 was built to "protect the edge from further erosion" (B. B. Lal 1979-1980: 90). In Lal's view, the first rampart was what Sharma called Rampart 2 and it was constructed no earlier than the sixth century BC. Erdosy developed Lal's argument by showing the absurdity of some of Sharma's early dates (Erdosy 1987: 3-6). The most obvious contradiction of Sharma's chronology is the presence of coins in early levels. According to Sharma's report, uninscribed square coins are found throughout structural periods II.5 – III.10 (G. R. Sharma 1960: 80). If Sharma's dates were correct, this would mean that coins had been used in Northern India by the ninth century BC! Sharma does not see anything wrong with this and concludes that the "the beginning of coinage can be placed… in the early centuries of the first millennium BC" (G. R. Sharma 1960: 81).

Another obvious contradiction is in the correlation of chronologies of different excavated areas. Aside from the main chronology based on the stratigraphy of defenses, Sharma formulated three other chronologies: one for the area of the Asokan pillar, one for the Ghoshitarama Monastery, and one for the palace. Had all these chronologies been correct, the first rampart would have been built in 1025 BC; structural activities in the area of the Asokan Pillar would have intensified in the fourth century BC; the palace would have been erected in the eight century BC; and the area of the Ghoshitarama

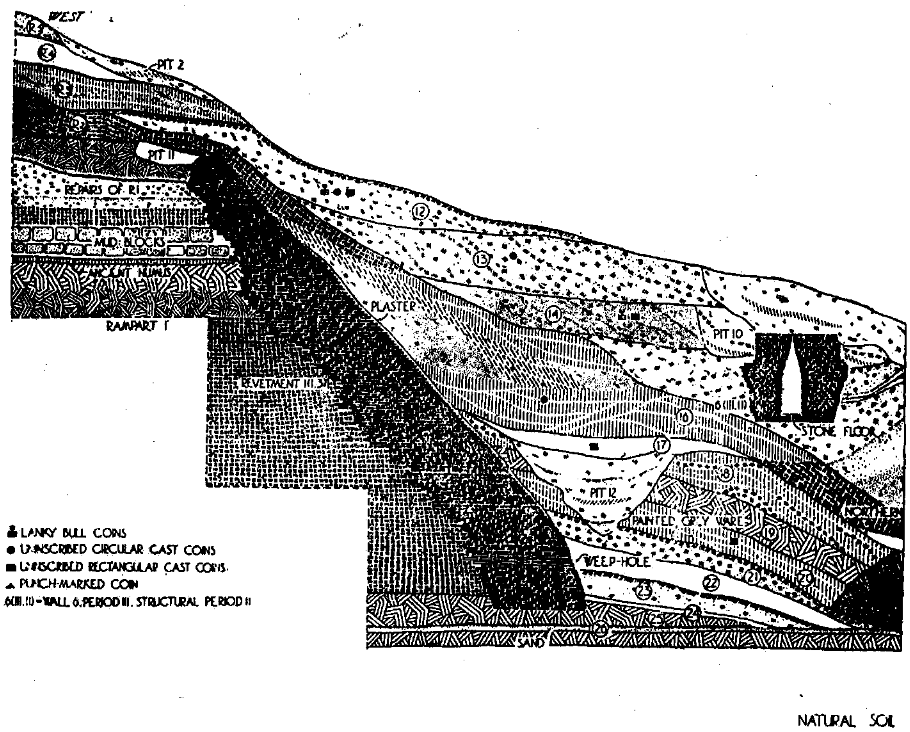


Figure 14: Section across Defences on AB (after G. R. Sharma 1960)

monastery would have been settled around the sixth or fifth century BC. One wonders, under this scenario, whether Sharma ever asked himself what was the relationship between the four excavated areas and whether these areas had always been parts of the same site.

Fortifications: Kausambi has probably the most famous defense system of early historical India (see figures 11, 12, 14, 15). Considering the scale of its ramparts, walls, moats and towers, it is not surprising that Sharma saw the investigation of defenses to be one of the prime goals of his project and worked out an elaborate structural history.

Not all of the twenty-five structural periods that he defined were equally important. As noted above, Sharma's structural history was dubious and many periods that he defined must have erroneously marked contemporaneous structural activities. One must not however discard the entirety of his sequence. At least some of the structural periods (SP) reflect major modifications in the defense system and it is worthwhile to revisit them. In my opinion, nine of the twenty-five structural periods indicate important qualitative changes (see figure 13). These nine structural periods are:

1. SP I.3, ca. 11th – 10th centuries BC: The first clay rampart and the first burnt brick revetment are constructed. The revetment is 9 ft thick at the base, available to a height of 40 ft and is covered by 2-3 ins. thick plaster made of mud and lime (G. R. Sharma 1960: 27-28).

2. SP II.5, ca. 9th century BC: The first moat is dug (G. R. Sharma 1960 29).

3. SP III.10, ca. 6th – 5th centuries BC: Rampart 2 and Revetment 2 are built. The moat re-excavated and road 3 is laid out (G. R. Sharma 1960: 31-32).

4. SP III.13, ca. 4th – 3rd centuries BC: The system of guardrooms, towers and flank walls is established. This constitutes the new system of defense, which fully replaces the old system by the SP III.15, ca 2nd century BC. SP III.13 (G. R. Sharma 1960: 33-34).

5. SP III.14, ca. 3rd – 2nd centuries BC: The first evidence for a calamity comes from this period. Sharma believes that massive deposits of ash as well as the destruction of revetment 2 "offer unmistakable evidence of invasion". As additional evidence, he also notes that many double-tanged arrowheads were discovered in ash deposits and in the destruction debris of the Revetment 2 (G. R. Sharma 1960: 34).

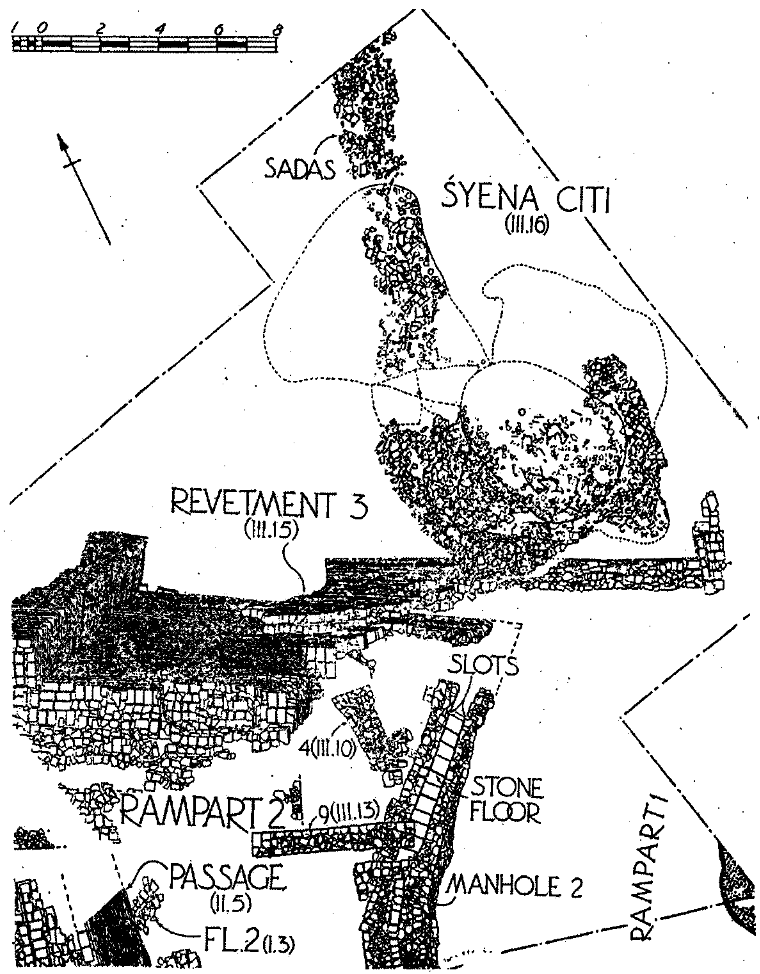


Figure 15: Kausambi, Plan of Defences (after G. R. Sharma 1960)

6. SP III.15, ca. 2nd century BC: Sharma's highly debatable identification of the fallen debris with the Syenaciti of the Purusamedha, a type of human sacrifice known from the Vedic literature, belongs to this period (G. R. Sharma 1960: 34-35).

7. SP III.16, ca. 1st century BC: Second major destruction on the site occurs. Sharma points to "extensive burning of the site, forming an accumulation of an ash layer

in which are buried fragments of bones and a few pieces of skull" (G. R. Sharma 1960: 35). This is also the final period of the NBPW.

8. SP IV.19, ca 2nd century AD: Another destruction takes place. Sharma argues for "the extensive conflagration and destruction indicating an invasion during which all the buildings were razed to the ground" (G. R. Sharma 1960: 36).

9. SP IV.24, ca. 5th-6th centuries AD: The greatest destruction takes place. Everything is burnt down. Sharma hypothesizes that "it was the result of a violent assault that shook the city to its very foundations. The defenses... were finally abandoned and henceforth throughout its remaining life, the town was defenseless. The barbed arrow-heads Type (K), which make their appearance for the first time in large number, were obviously the instruments of massacre, pillage and unprecedented devastations" (G. R. Sharma 1960: 37).

A careful reassessment of data recorded in association with these nine periods allows us to make two hypothetical conclusions. First, the rampart appears to have been built not earlier than the sixth century BC. Second, neither military threat nor protection from floods is likely to have played a significant role in the construction of the defense system. The first conclusion is based on the fact that the earliest structural levels contain coins characteristic of the mid first millennium BC (see figure 13). The argument for the second conclusion can be presented as follows:

On one hand, given the grandiose scale of fortifications warfare would be the easiest explanation. This is particularly so, because structural periods III.14, III.16, IV.19 and IV.24 allegedly indicate destruction and contain a significant amount of weapons, i.e., 370 arrowheads and 58 fragments of spears for periods III and IV (G. R. Sharma

1960: 45-48). On the other hand, the layout of fortifications has several very puzzling features. First, fortifications are particularly massive in two areas: around the so-called palace in the southwestern corner of the site, and on the eastern side of the site south of the Ghoshitarama monastery (see figure 11). In other areas ramparts are much less imposing. Second, there are many wide openings between the ramparts and some parts of the site are unprotected. For example, the rampart along the Yamuna River has long gaps, which make protection from floods impossible. Third, the chronology of the ramparts has never been properly determined. Yet differences in size, structural history and most importantly in the time of initial occupation of the adjacent areas indicate that different ramparts may have been built in different periods of time. If this was the case, Kausambi was fortified not as a one-time event but during a long period of time. Finally, judging from Sharma's structural history, fortifications at Kausambi underwent two main stages of development: the first one centered on ramparts, revetments and the moat; the second one centered on guardrooms, towers and flank walls. Transition from the first to the second stage marked a significant technological shift, which was likely to be caused by a shift in the function of fortifications as well.

In summary, to explain the construction of the fortification system at Kausambi exclusively as a response to warfare and floods appears to be erroneous. Explanations making an emphasis on non-utilitarian or symbolic factors seem to be more appropriate and I will return to this issue in the concluding part of this chapter.

Authority: The main evidence for authority at Kausambi is the defense complex itself. Obviously, massive ramparts, bastions and revetments could not have been built without organization of labor and strong authoritative control. The three other excavated

areas of Kausambi provide solid evidence for authority as well. The traits particularly indicative of the emergence of authority in these areas are architecture, weapons, figurines, coins, and seals.

Architecture: Along with the area of defenses, all other excavated areas revealed significant architectural remains. In the area of the Asokan pillar, a whole district with roads, alleys and houses was exposed. In the Ghoshitarama monastery, a stupa and monastic establishments were excavated. In the area of the palace, a complex of large stone structures was detected.

For the area of the Asokan Pillar, Sharma defined a sequence of three periods. The deposits of Period 1 revealed no traces of structural activities except for a few circular pits measuring approximately six inches in diameter at the top (G. R. Sharma 1969: 16). The pottery chosen to represent this period was the PGW, even though very few PGW sherds were discovered. The period was dated vaguely to the first quarter of the first millennium BC. Period II was associated with the NBPW and dated to ca. 6th – 2nd centuries BC. The structural history of this period consisted of pre-structural phases and structural sub-periods (G. R. Sharma 1969: 23). The main difference between the phases and sub-periods was the use of burnt brick. Dated to ca 6th – 4th centuries BC, prestructural phases were defined by pits, postholes, mud-brick walls, ring-wells, and concrete pavements. Transition to structural sub-periods marked drastic qualitative changes. In sub-period 1A, the main road was built, a street made of powdered brickbats was laid out, and the first houses made of burnt brick were built (G. R. Sharma 1969: 24-25, 37). In Sharma's own words, "this sub-period marked a new epoch in the history of

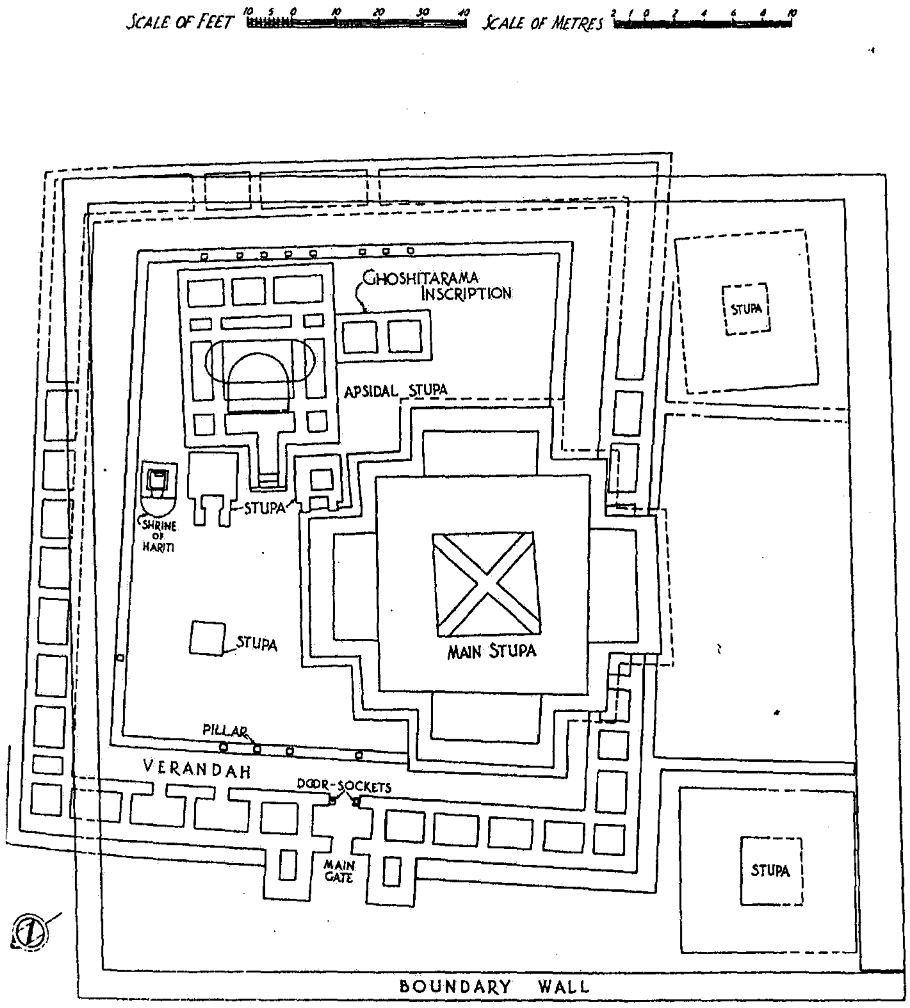


Figure 16: Kausambi, Ghoshitarama Monastery (after G. R. Sharma 1960)

habitation in this area" (G. R. Sharma 1969: 37). Based on coins and stratigraphy, Sharma convincingly dated this sub-period to the mid-fourth century BC.

For the area of the Ghoshitarama monastery (see figure 16), Sharma defined a sequence of sixteen structural phases covering a period of a thousand years from the sixth century BC to the sixth century AD (IAR 55-56: 20). Phase I, dated to the sixth century

BC, marked the earliest occupation at the site and was characterized by pits/postholes and the NBPW (IAR 55-56: 20). During Phase II, dated to ca. 5 century BC, the main stupa was built. During Phase III, dated to ca, 4-3rd centuries BC, the stupa was renovated. Prior to Phase VI, no clear evidence of other architectural activities was established.

For the area of the palace, Sharma defined a sequence of three structural phases. During Phase I, the walls were reportedly built of "random rubble" with "huge undressed stones being set in lime mortar" In Phase II, the core of the walls remained of rubble; while the facings were made of dressed stones of relatively regular size. Towards the end of this Phase, the palace was destroyed. In Phase III, the core of the walls was made of bricks, the facings were covered with dressed stones, and the dressed stones were coated with lime plaster (IAR 60-61: 34). The dating of these three phases was very controversial. Stratigraphically, Sharma related the initial construction of the palace to the pre-NBPW deposits and consequently dated Phase I to ca. 600 BC (IAR 60-61: 34). Later, he pushed this date even earlier, to ca. 800 BC (IAR 1961-1962: 51). The last phase was dated to the first-second century AD (IAR 61-62: 52). Thus, the palace, in Sharma's view, functioned for almost a thousand years, from the beginning of the first millennium BC to the beginning of the first millennium AD. It is not surprising that these dates raised severe criticism from scholars. Lal for example responded by proposing that the palace was built not earlier than the sixteenth century AD (B. B. Lal 1985c)!

Thus architectural remains in these three areas provide ample evidence for authority, yet the chronology is very problematical. The most obvious incongruence is an early date for the construction of the palace. It is highly unlikely that the palace was built at the time when in other parts of Kausambi there were wattle-and-daub huts or even no

occupation at all. Unfortunately, the data published in the IAR are not sufficient for evaluating Sharma's argument. That Sharma connects phases in the construction of the palace with sub-periods in the structural history of fortifications is convincing and reasonable (IAR 1961-1962: 50-51). The palace is located in the southwestern corner of fortifications, right next to the rampart and an imposing tower topped by a bastion. If the construction of fortifications is placed in the middle of the first millennium BC, the construction of the palace must be dated soon after. The dates and structural histories of other architectural remains are more reasonable. They show that by fifth – fourth centuries BC, structural activities indicative of social changes and the presence of authority were underway in the area of the Asokan Pillar and the Ghoshitarama Monastery.

Settlement size: Since the excavations were carried out in four different areas and some of these areas were quite far away from the other, one would expect that comparing the dynamics of habitation and structural activities in these areas would provide some hints for the creation of a larger picture in regards to the expansion of the site. Unfortunately, all the early dates provided by Sharma are dubious. As discussed above, the method of assigning equal periods of time to each structural modification is simply meaningless. Sharma's later dates are more reasonable, yet they do not allow tracing the expansion of the settlement. At this point, what one can say is that even if the four excavated areas had been occupied by sixth-fifth century BC as parts of one settlement, this alone would have put Kausambi in an exceptional position as an incredibly large site.

Coins: In the area of the Asokan pillar, the earliest uninscribed coins are dated to the third century BC (G. R. Sharma 1969: 82-83). The earliest inscribed coins belong to

Brihaspatimitra, the ruler who lived around second century BC (G. R. Sharma 1969: 83). In the area of defenses, the earliest uninscribed coins are associated with structural period II.5 (G. R. Sharma 1960: 80-81); the first punch-marked coins are associated with the deposits of structural period III.10 (G. R. Sharma 1960: 80). The chronological implications of these stratigraphic associations have been discussed above. If one does not follow Sharma's lower chronology and dates the first rampart to the sixth or fifth century BC, the first uninscribed coins appear right after, i.e., during the fifth or fourth century BC. Considering the emergence of coins on other Gangetic sites, this scenario is most likely.

Terracotta figurines: In the area of the defenses, 323 complete terracotta figurines were discovered. The earliest hand-made figurines are associated with Sub-period III.10, the NBPW, dated by Sharma to ca. sixth-fifth centuries BC (G. R. Sharma 1960: 74). Unfortunately, Sharma does not provide any further information on intensification, standardization or any other changes in the production of figurines. For the area near the Asokan Pillar, Sharma provides more information. The earliest figurines come from the deposits of Pre-Structural Phase IV, dated to ca. fifth century BC (G. R. Sharma 1969: 47). With the transition from Pre-Structural Phases to Structural Sub-Periods, figurines become more standardized and mass-produced. As Sharma notes "figurines from earlier levels, viz., Pre-Structural IV to Sub-Period IB, were of better quality, while those of the later Sub-Periods were cruder in appearance and were seemingly prepared out of coarse and gritty paste" (G. R. Sharma 1969: 47). This transition chronologically coincides with the proliferation of architectural activities and a general growth of complexity on the site.

Weapons: A large number of arrowheads, spears and javelins were discovered in the area of defenses. Iron and bone arrowheads appear in SP II.5, i.e. the period of the initial construction of a moat. The largest number of weapons is associated with the deposits of period III, the NBPW.

To conclude, Kausambi contains ample evidence for authority. The latest by the fourth century BC, drastic sociopolitical changes were underway in the areas of defenses, the Asokan pillar, the Ghoshitarama monastery and possibly the palace. If the dating had been more accurate, the palace would have been the most unambiguous proof of authority. Judging from literary sources, it may have been the residence of King Udayana, a legendary ruler of Kausambi. According to Sharma's estimations, the palace occupied an area of 315 by 150 meters (IAR 60-61: 33). It stood on a 2.5-meter high platform of mud and mud-brick. At the junction of its walls, there were circular towers varying from 4.5 to 8 meters in diameter. Inside, the palace consisted of a hall, flanked by rooms with lime flooring. All walls were reportedly covered with lime plaster of uniform thickness. There was a flight of steps leading to the tower from the central hall (IAR 60-61: 34). Given the lack of palatial structures in the Ganges Civilization, the re-excavation and dating of the remains of this structure could greatly contribute to the understanding of the early history of Kausambi. So far, fortifications and architecture remain the most unambiguous proof of authority, and it is still unclear whether the excavated areas were all parts of the same site or represented separate and independent localities.

Mathura

Reports and references: IAR 1954-1955:15-16; 1966-1967:41-43; 1968-1969:40; 1969-1970:42-43; 1970-71:39-40; 1971-1972:47-48; 1972-1973:33-35; 1973-1974:31-32; 1974-1975:48-50; 1975-1976:53-55; 1976-1977:54-56; Chattopadhyaya 1989, Dalal 1989, Fussman 1989, P. L. Gupta 1989, Hartel 1989, 1993, M. C. Joshi 1989, Margabandhu 1989, Narain 1989, Ray 1989, Shaffer 1989, Srinivisan 1989, Thapar 1989, Vogel 1909c, 1914, 1915.

Introductory remarks: Mathura is a city of great history, art and literary tradition. It is located on the Yamuna River in the district that carries the same name (see figure 17). Owing to its famous sculptures and other antiquities as well as to the leading political role it played during the time of the Kushanas, Mathura has always attracted the attention of archaeologists. Cunningham, Burgess, Fuhrer, Vogel and others undertook occasional excavations in Mathura in the end of the 19th century. These excavations focused predominantly on finding sculpture and other objects of art. In 1954-55, M. Venkataramayya and B. Saran of the ASI excavated on the Katra mound and defined the first sequence of cultures for Mathura (IAR 1954-55: 15-16). In 1973-1977, the ASI under the directorship of B. K. Thapar and M. C. Joshi carried out another project in Mathura (IAR 1973-74: 31-32; 1974-75: 48-50; 1975-76: 53-55; 1976-1977: 54-56). By the end of the project, they had excavated fourteen sites and defined a sequence of the five following periods (IAR 1975-76: 53-55; (M. C. Joshi 1989: 167).

Period I (6th – 4th cents BC)	PGW, Red, Black-Slipped, BRW
Period II (4th – 2nd cents BC)	NBPW, fortifications
Period III (2nd – 1st cents BC)	NBPW

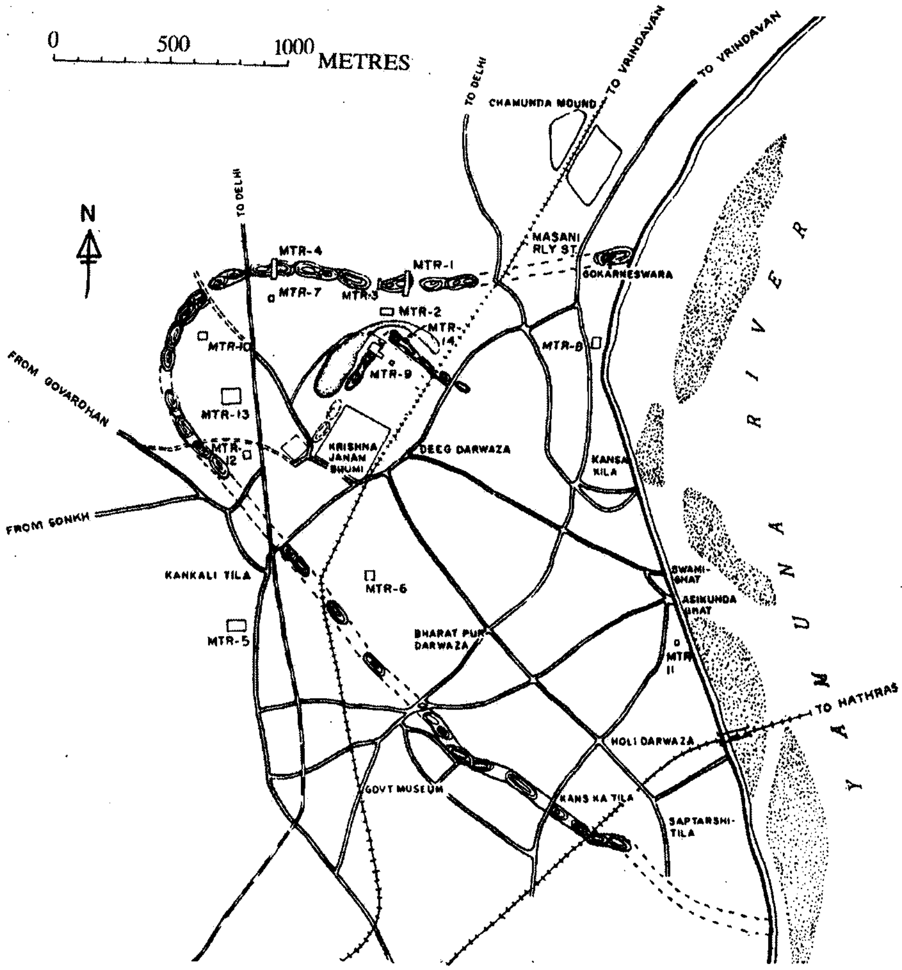


Figure 17: Plan of Mathura (after Joshi 1989)

Period IV (1st c BC – 3rd c AD)	major structural activities: water reservoir, inner fortifications
Period V (4th – 6th centuries AD)	mud platforms

Besides this chronology, the ASI project conducted under the directorship of Thapar and Joshi brought many important results. Unfortunately, aside from four brief reports in the IAR and a few occasional articles, no comprehensive report on this excavation has been published.

Fortifications: A massive crescent-shaped mud wall, called Dhulkot, surrounded ancient Mathura from the west, north and south. The Yamuna River protected the fourth, eastern side of the settlement (see figure 17). One of the tasks of the ASI project headed by B. K. Thapar and M. C. Joshi in the 1970s was to examine the character of Dhulkot. In the season of 1973-74, two trenches (MTR-1, MTR-3) were laid across the Dhulkot. It was established that the original fortification was built of mud on "the uneven natural soil resulting from successive floods". In other words, the excavators argued that natural mounds were utilized in the construction of defenses. Gaps between the mounds were filled with layers of compact clay (IAR 1973-74: 31-32).

During the season of 1974-1975, another trench (MTR-4) was dug across the Dhulkot. Based on the data from this trench, the excavators distinguished two constructional phases (IAR 1974-1975: 48-50). The first phase was characterized by a rampart made of compact earth mixed with *kankar* with a maximum height of 6.45 m. The outer face of this rampart was strengthened with oblique packings. At the end of this phase, around the 1st century BC, the excavators argued, the mud fortification lost its utility (IAR 1974-1975: 49). During the second phase, at the time of the Sakas and Kushanas, fortifications were revived and renovated. The wall was enlarged and its eroded portions were repaired (IAR 1974-1975: 49).

In the season of 1975-1977, the study of the defense system at Mathura continued. First, it was established that Period IV witnessed the construction of an inner mud-fortification. A trench (MTR-9) cut through this fortification showed that the inner fortification was built of wet mud and clay on top of architecture of the previous period. On the outer edge, the inner fortification was strengthened by "a retaining wall of discarded bricks, brick-bats, tiles, and burnt lumps of mud" (IAR 1975-1976: 55). The width of the retaining wall varied from 22 to 40 cm. Its height varied from 80 cm to 1.0 m. The basal width of the inner fortification reached in some places 17 meters (IAR 1975-1976: 55). Second, the remains of a semi-circular bastion (trench MTR-14) were discovered at the northwestern turn of the inner fortification (IAR 1976-1977: 55). Third, a moat was built on the Katra mound, on the northwestern side of fortifications (M. C. Joshi 1989: 169).

As far as chronology is concerned, phases in the construction of defenses perfectly correlate with the revised cultural sequence by Thapar and Joshi (IAR 1975-76: 53-55). The construction of the first mud rampart belongs to the early part of Period II, the NBPW, dated to the 4th – early 3rd centuries BC. The decay of the rampart falls into Period III, the late NBPW, dated to the 2nd – 1st centuries BC. The renovation of the rampart and the construction of the inner fortification system belong to Period IV, culturally associated with the Saka–Kushanas and dated to the 1st century BC – 3rd century AD.

As far as the function is concerned, the evidence is ambiguous. On one hand, it is not unreasonable to suggest that military function played an important role; the dimensions of the walls and bastions are massive, the line of fortifications is solid, and in

addition to the main fortification system there is a massive internal fort. On the other hand, some traits of the structural history and layout of the outer rampart challenge both military and ecological explanations. First, the rampart does not protect the site fully. Encircling the site from the west, north and south, it leaves the bank of the Yamuna River completely unprotected. The ecological function, under this scenario, can be completely excluded: even if the site had some protection from floods, the rampart clearly played no role in it. The military function is not certain either; the length of the Yamuna embankment in Mathura was over three km and it is difficult to imagine how without additional protection the river itself could defend the site militarily. If there had been a necessity to defend the site from military threat by building a high and massive rampart, the bank of the Yamuna River would not have been left unprotected. Second, Joshi notes that in Period III the defense wall lost its original function "as a defensive or protective enclosure for the occupants" (M. C. Joshi 1989: 168). Joshi explains this by the presence of occupational deposits over portions of the wall. Yet during Period IV, he notes, the function of the wall was rejuvenated (M. C. Joshi 1989: 169). From the point of view of military conflict in Northern India, this structural history makes no sense. If the wall had indeed protected the site from the military threat during Period II, it would not have lost its function during Period III; for it is widely known that the 2nd and 1st centuries BC, to which Period III belongs, was a time of significant military conflict. Moreover, Mathura was directly involved in this conflict; during the reign of Pushyamitra Shunga the city was allegedly lost to the Greeks.

In summary, it appears that the fortification system at Mathura had a non-utilitarian function. At some point, the excavators hinted at a possibility of a ritual

meaning; as they found the remains of animal bones and ash in a pit at the base of the inner fortification wall (IAR 1975-1976: 55). Also, from the time of initial construction the rampart was smoothly incorporated in the natural landscape (IAR 1973-74: 31-32). The use of landscape by itself of course does not exclude the military or ecological function, yet if combined with the aforementioned traits it provides a sense of the symbolic rather than utilitarian use of the fortification system. In any case, the fortifications of Mathura provide an intriguing and ambiguous case. I will return to it in the final part of this chapter.

Authority: Archaeological evidence for authority in Mathura seems to appear in Period II. The traits indicative of authority are scarce and difficult to verify since the excavators have not published the final report. Nonetheless, judging from brief reports in the IAR and a few other publications, the transition from Period I to Period II marks important and drastic changes in material culture, settlement size and settlement pattern (M. C. Joshi 1989).

Settlement size: The settlement significantly expands in size. During Period I, the settlement is limited to the area around Ambarish Tila (MTR-8). In Period II it covers the entirety of the fortified area.

Architecture: The only remaining traces of structural activity from Period I are mud-floors and postholes. During Period II, mud-floors and postholes are also present, yet structural activity intensifies. Houses are built on mud platforms and are often associated with ring wells. Other features include U-shaped ovens, drains, and the occasional use of baked brick (M. C. Joshi 1989); IAR 75-76: 55).

Coins: Coins have been an important source for the reconstruction of Mathura's dynastic history as well as for the study of its separation from Magadha. The first square punch-marked coins appear in Mathura during Period II. One numismatist believes that the minting of an independent coin series started in Mathura as early as in the third century BC (P. L. Gupta 1968).

Terracotta figurines: Human figurines appear for the first time during Period II. "Mother-goddesses" and elephant-riders are the most common types. Joshi argues that during Period II, figurines were manufactured in large numbers and on a commercial scale (M. C. Joshi 1989: 168).

Weapons: There is a noticeable presence of arrowheads and spearheads both in Period I and Period II. Unfortunately, Joshi does not provide any exact amounts, ratios or typologies.

Pottery: In pottery production, Plain Grey and Red Wares dominate during the both periods. On a noticeable scale, the NBPW is introduced in Period II, although the first occasional sherds appear in Period I.

Settlement pattern: Joshi makes an important observation with regard to the settlement pattern of the Mathura area. Many sites of the Mathura region were not under occupation during Mathura's Period I, yet they were occupied during Period II (M. C. Joshi 1989: 167-168).

If these observations are correct, authority was present on the site of Mathura by the fourth century BC. The expansion of the site, the emergence of coins, the intensification of architectural activities and other changes would have been impossible without the presence of authority. On the other hand, this means that during Period I

Mathura was a small helmet-type settlement, not the capital of the Surasena janapada, as the texts make us believe.

Pataliputra

References: IAR 1953-1954: 9-10; 1954-1955: 18-19; 1955-1956: 22-23; Ahmad 1988, Altekar & Mishra 1959, Devi et al 1980, Kumar 1987, Mate 1969-1970, Megasthenes 1877, Mukherji 1898, Patil 1963, Sinha & Narain 1970, Spooner 1913, Waddel 1892, 1903.

Introductory remarks: Pataliputra lies on the right bank of the Ganges River underneath the modern city of Patna (see figure 18). It is one of the largest early historical sites in South Asia. According to literary sources, Pataliputra was the second capital of Magadha and the capital of the Mauryan Empire; it maintained political and cultural importance from the 5th century BC until the 6th century AD. Archaeologically, Pataliputra is known by the names of its districts, such as Kumrahar, Bulandibagh, Panc Pahari, Mahabirgarh, Sadargaly and Lohanipur (see figure 18). Over the years, excavations at these and other localities revealed numerous artifacts, features and two occupational sequences. L. A. Waddell carried out the first systematic excavation at Pataliputra in 1892-1899. D. B. Spooner excavated at Pataliputra in 1912-1916. J. A. Page and M. Ghosh conducted further excavations in 1926-1927. Altekar and Mishra of the Jayaswal Research Institute undertook excavations in 1951-1955. The latter project was the first to result in a cultural sequence for Pataliputra. This sequence was based on nine cuttings in the area of Kumrahar and included six periods (IAR 1953-1954: 9-10; (Altekar & Mishra 1959: 14-21).

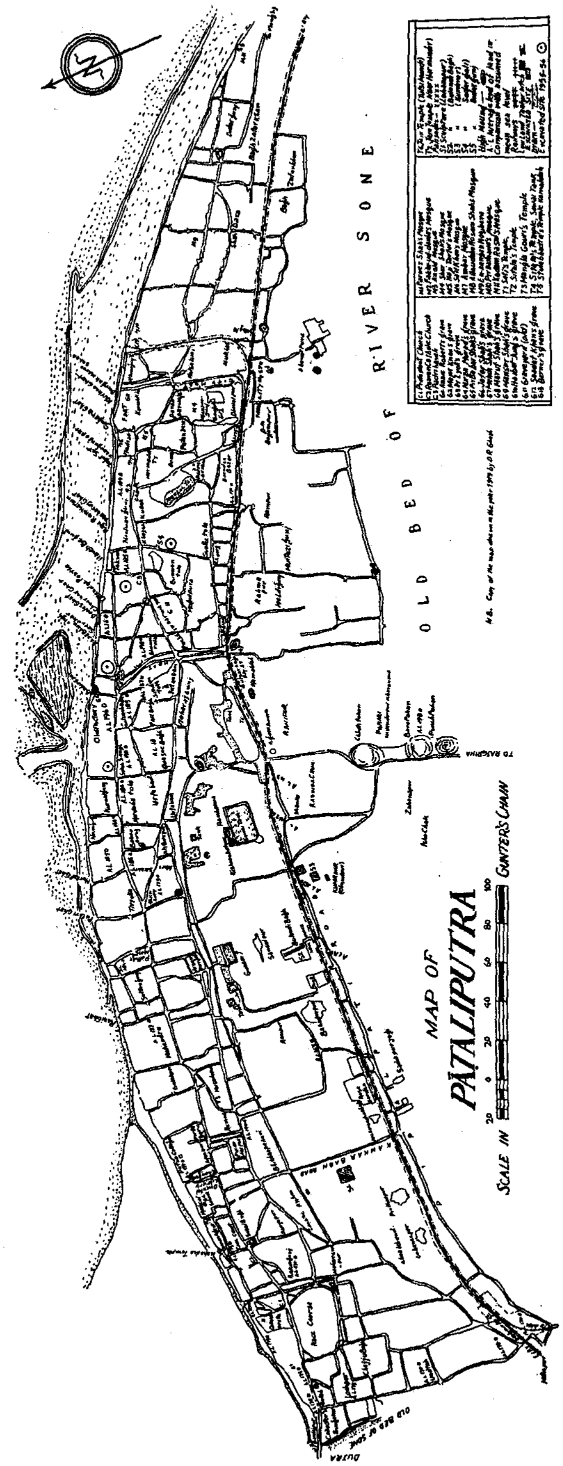


Figure 18: Map of Pataliputra (after Altekar and Mishra 1959)

Period I	? – 150 BC	Grey Ware, a few NBPW sherds, coins
Period II	150 BC – 100	NBPW, Red Ware, Grey Ware, Sunga terracottas, coins, stone pillars, a sherd inscribed in Brahmi
Period II	AD 100 – 300	NBPW, Grey Ware, Kushana coins and terracottas
Period IV	AD 300 – 450	Coins of Chandragupta I, seals in Gupta script, Gupta terracottas
Period V	AD 450 – 600	Red Ware, Brick structures
		No signs of occupation
Period VI	AD 1700 – ?	Muslim Glazed Pottery, Mughal coins

Judging from pottery, coins, terracotta figurines, seals, and inscribed sherds, this sequence appears to be quite accurate. One must however keep in mind that the sole basis for the formulation of this sequence was Kumrahar, an area in the eastern part of Pataliputra where Spooner discovered the famous 'pillared hall.'

In 1955-1956, B. P. Sinha and L. A. Narrain of the Directorate of Archaeology and Museums at Patna continued excavations at Pataliputra. Six trenches were laid out in the four separate parts of town: Mahabirghat, Shah-Kamal Road, Begum-Ki-Haveli and Government Press Play Ground. Trenches varied from 8 to 15 feet in width and from 18 to 51 feet in length. As a result of this project, a sequence of three long periods was defined (IAR 1955-56: 22-23; (Sinha & Narain 1970: 10-14).

Period I	600 BC - 150 BC	NBP, Black & Red, and Grey Wares

Period II	150 BC - AD 500	Sunga & Kushana terracottas, brick architecture
	No signs of occupation	
Period III	1700 AD -	Muslim Glazed Ware, figurines, coins

In many respects, this sequence reconfirmed the sequence of Altekar and Mishra. Most importantly, the two sequences showed that the settlement had been under occupation roughly for a millennium, from the 6th century BC to the 6th century AD.

Fortifications: According to the *Indika* by Megasthenes, Pataliputra was "of the shape of a parallelogram," and was "girded with a wooden wall, pierced with loopholes for discharge of arrows" (see figure 15). The wall had "a ditch in front for defence and for receiving the sewage of the city" (McCrindle 1877: 66). Today, Pataliputra lies underneath the modern city of Patna, making further excavations almost impossible. Yet some archaeological data were made available to verify the words of Megasthenes. Main evidence for the wooden fortification wall comes from Bulandibagh, an area in the western part of Patna. Unfortunately, archaeologists who obtained this evidence did not prepare reports on their excavations. Neither did they make any drawings. Hence, the ensuing data are taken from brief reports (ASI-AR 1926-7: 135; 1935-6: 54) and one secondary source (Patil 1963).

In 1915-1917, Spooner excavated at Bulandibagh on behalf of the ASI. During this excavation, he unearthed a structure consisting of two parallel walls made of wooden poles. Underneath this structure, he found a "floor composed of long squared timbers, with their ends fitted into sockets into the uprights of the walls" (Patil 1963: 394). The length of the discovered wooden walls was 24 feet. The floor extended for at least 350 feet. Judging from the trimmed ends of the floor timbers, it was concluded that the wall

originally extended to the same distance as the floor. The height of the wooden walls was estimated to rise at least 9 feet above the floor level. Based on the depth of the deposit and on stratigraphic association, the entire structure was dated roughly to the Mauryan Period (Patil 1963: 394). Spooner's discovery was not the exception. In 1926-27, J. A. Page and M. Ghosh resumed excavations at Bulandibagh and exposed timber floor and wooden poles over a length of 137 meters. In 1935, a very similar wooden structure was discovered at Gosain Khanda, an area to the east of Bulandibagh. The uncovered fragment of a wall at Gosain Khanda was 100 feet long, about 7 feet high and 5'6'' feet thick. It was argued that the wall continued further north and south (Patil 1963: 396). Another group of wooden structures was reported by Waddel and then by Mukherji from Rampur, an area west of Bulandibagh. Lohanipur, an area rich in antiquities, which is located a mile west of Bulandibagh, also produced evidence for a wooden palisade (Patil 1963: 398-400).

Thus, Megasthenes appears to have been accurate in mentioning wooden walls around Pataliputra. Although most of the cited data are poorly published or lost, the overall number of references to wooden walls is too large to be discarded as erroneous. The chronology and structural history of these walls are unclear, yet a few words can be said about their function. Megasthenes recorded mostly military attributes: "loopholes for the discharge of arrows", "570 towers", "four-and-sixty gates", and the encircling ditch (McCrindle 1877: 66, 68). I would not however take the words of Megasthenes as solid evidence of military function. Walls made of wood are not the best way to protect a large city from a military attack. Neither are they effective in protecting the city from floods.

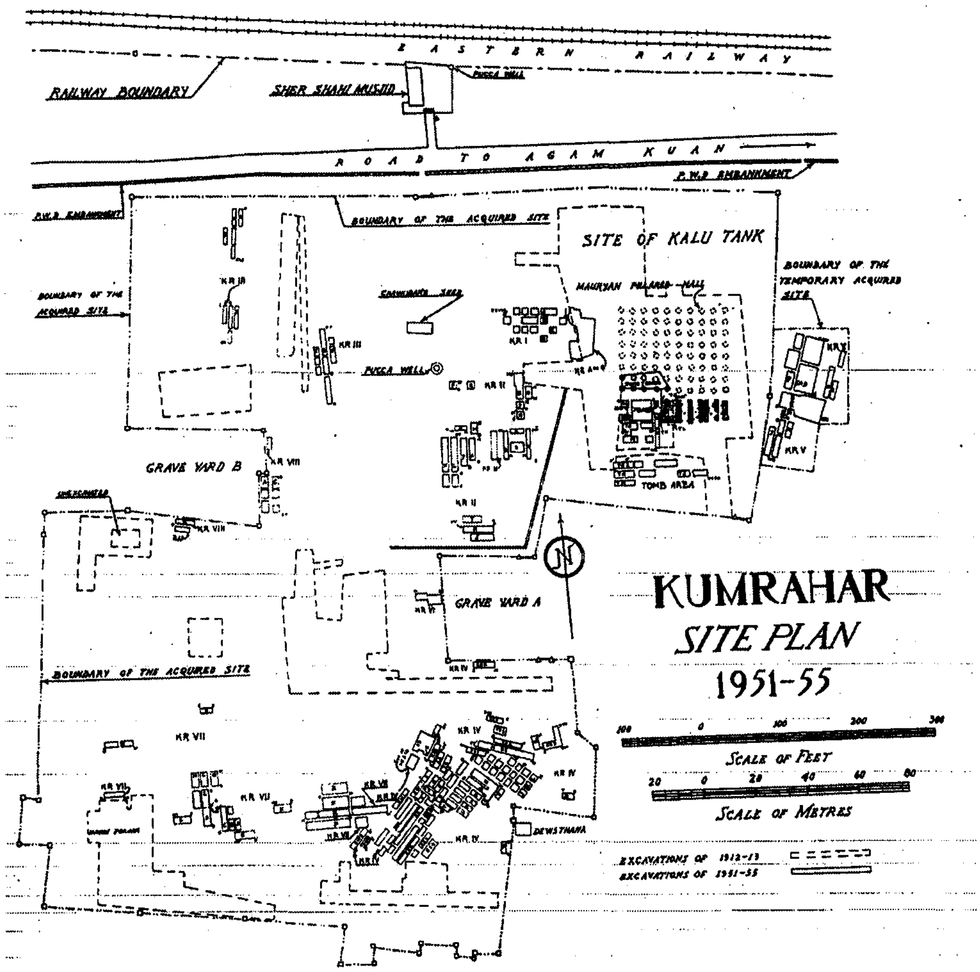


Figure 19: Kumrahar, excavated remains (after Altekar and Mishra 1959)

Authority: According to the Jain and Puranic literature, the ruler of Magadha Ajatshatru founded Pataliputra as a fort in the fifth century BC. Ajatshatru's successor, Udayi, moved the capital of Magadha from Rajgir to Pataliputra. Thus in the view of literary sources, Pataliputra was a seat of authority from the fifth century BC. Archaeologically it is difficult to reconfirm this claim, as the results of previous excavations are not sufficient enough for tracing specific changes that might have

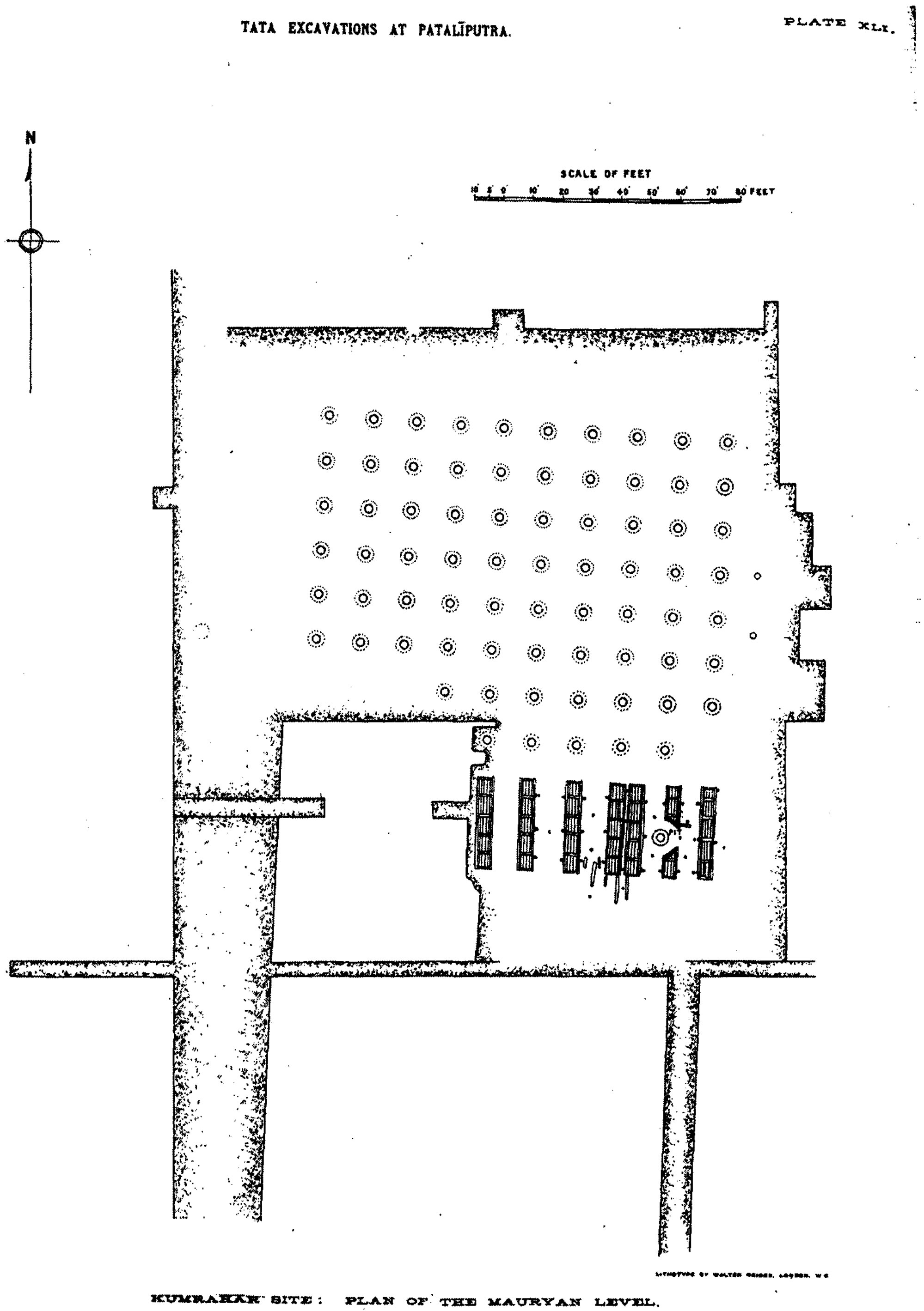


Figure 20: The Great Hall at Kumrahar, Pataliputra (after Spooner 1913)

characterized the genesis of Pataliputra's material culture during the sixth, fifth and fourth centuries BC. According to the chronology by Sinha and Narain, Period I begins around the sixth century BC and lasts until the middle of the second century BC. The early phases of this period are not well defined. The data on architecture, figurines, coins and weapons are too vague to make even hypothetical conclusions. For example, no significant structural remains are associated with Period I: ring wells, postholes and a brick floor were recorded on the site of Mahabhirgat; a wall was traced on the site of Government Press Play Ground; two walls, a brick floor and several ring wells were unearthed on the site of Begum Ki Haveli (Sinha & Narain 1970: 15-19). Figurines are not very informative either. Human figurines are found throughout the period. The figurines found in the earlier levels are all hand-made and abstract. The human figurines from the middle and upper levels are more realistic and the plaques are produced from moulds (Sinha & Narain 1970: 41). As far as coins are concerned, the first uninscribed cast coins and the first punch-marked coins appear in the middle levels of Period I (Sinha & Narain 1970: 48). Finally there is a good number of bone arrowheads associated with Period I but none of them are chronologically and spatially differentiated (Sinha & Narain 1970: 55).

A potentially better archaeological proof of authority is the 'Pillared Hall' discovered by Spooner at the area of Kumrahar (see figures 19, 20). The remains of this hall consisted of the foundations, sites and fragments of 80 to 84 monolithic stone pillars. The hall was constructed during the Mauryan Period and destroyed either in the 6^{th} century AD (Spooner 1913) or in the second century BC (Altekar & Mishra 1959: 23). Judging from the structures built on top of the hall, the latter view is more likely. The

function of the hall is very obscure. No walls, floors, railing or any other structural elements were found inside the hall. Neither were found any significant Mauryan structures in the immediate vicinity of the hall. Most of the structures excavated at Kumrahar belonged to the later periods.

Thus paradoxically, the archaeology of Pataliputra has provided the least amount of credible data to reconfirm its status as the great center of power and the capital of the first South Asian empire.

Rajghat

Reports and references: IAR 1957-1958:50-51; 1960-1961:35-39; 1961-1962:57-59; 1962-1963:41-42; 1963-1964:58-59; 1964-1965:44-45; 1965-1966:54-55; 1966-1967:44; 1968-1969:41; Mate 1969-1970, Misra & Tiwari 1998, Narain & Agrawala 1978a, b, Narain & Roy 1976, 1977, Narain & Singh 1977, Patil 1963.

Introductory remarks: Rajghat represents part of ancient Varanasi and is located on the outskirts of the modern Varanasi (see figure 21). According to the literary sources, Rajghat was the capital of the Janapada of Kasi and played an important role in the early history of northern India. K. Deva conducted a brief season of excavations in Rajghat in 1940. A. K. Narain undertook several seasons of excavations at Rajghat during 1960-1967. As the result of this excavation project, A.K. Narain and T. N. Roy published a comprehensive report and defined a continuous sequence of six periods from the pre-NBPW occupations to the 17^{th} -18^{th} centuries AD (see figure 23) (Narain & Roy 1976: 21-35):

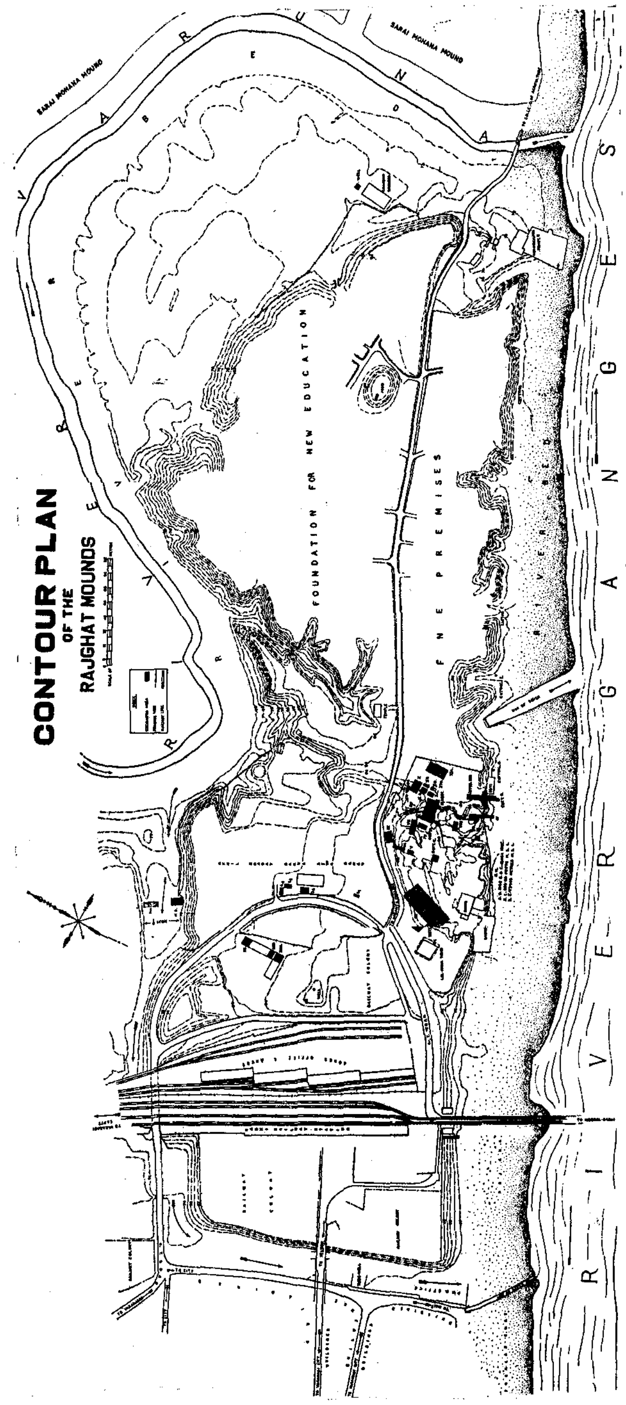


Figure 21: Contour Map of Rajghat (after Narain and Roy 1976)

Period I	ca 800 – 300/200 BC	
Sub-Period IA		BRW, BSW, Slipped and Unslipped Red Ware; numerous terracotta objects: discs, wheels, balls, etc; no structures.
Sub-Period I B		NBPW, wooden platform (first structural phase), a massive clay embankment against floods (second structural phase); channel or ditch built on the northern side of the settlement; terracotta figurines.
Sub-Period IC		Course Grey ware, deterioration of the NBPW
Period II	ca 300/200 BC – 0	Red Ware, general decline of the ceramic industry; first burnt-brick structures
Period III	ca 0 – AD 300	Red Ware, burnt-brick structures, seals, coinage, figurines
Period IV	ca AD 300 – 700	Red Polished Ware, sealings, beads, terracottas; objects
Period V	ca AD 700-1200	Red Ware, Greyish-Black Ware, architectural fragments, sculptures, terracotta objects, beads
Period VI	ca AD 1200-1700	Coarse Red Ware, various glazed wares, terracotta, figurines, beads, bangles, coins

Compared to other Gangetic sites, Rajghat was excavated on a large horizontal scale; more than twenty trenches – some of significant size – were excavated in different parts of this site (see figure 21). Today, a significant part of Rajghat is either covered by the modern city of Varanasi or washed away by the Ganges River.

Fortifications: The study of defenses at Rajghat is well documented and quite interesting. Since the view of the excavators on the date, nature and function of these defenses has significantly changed over time, it is worthwhile to review the main stages of research.

For a long time, it was thought that Rajghat had a massive rampart. During the first season of excavations conducted on behalf of the Banaras Hindu University, the excavators noticed "the remains of a rampart with gates" (IAR 1957-58: 50). As a goal of the next season, it was decided "to ascertain the nature of defenses" (IAR 1960-61: 35). A long trench measuring 16.48 m in length and 3.05 m in width (RGT-4) was dug in the southeast corner of the main mound. Later it was extended for another 12 m north into the town. The excavators reported:

> The most noteworthy discovery of the season was that of an enormous clay rampart dating back to the earliest occupations of the site. Built directly over the natural soil and available to a height of about 10 metres, the rampart has a pronounced slope towards the river (IAR 1960-1961: 37).

The rampart was dated to Sub-Period IA, ca 800-600 BC (IAR 1960-1961: 37), and two structural phases were distinguished (IAR 1961-1962: 58; (Narain & Roy 1976: 49).

1. Phase 1 was represented by a structure made of "well rammed, compact, brownish clay." The vertical extant of this structure was 5.10 meters; its basal width was 19.80 meters.

2. During Phase 2, the structure was raised by 1.10-meter thick mud filling and its inner side was patched by a similar filling towards the beginning of its slope.

It took another important discovery for the excavators to realize that they were dealing with the embankment against floods, not the rampart. In the season of 1964-65, a

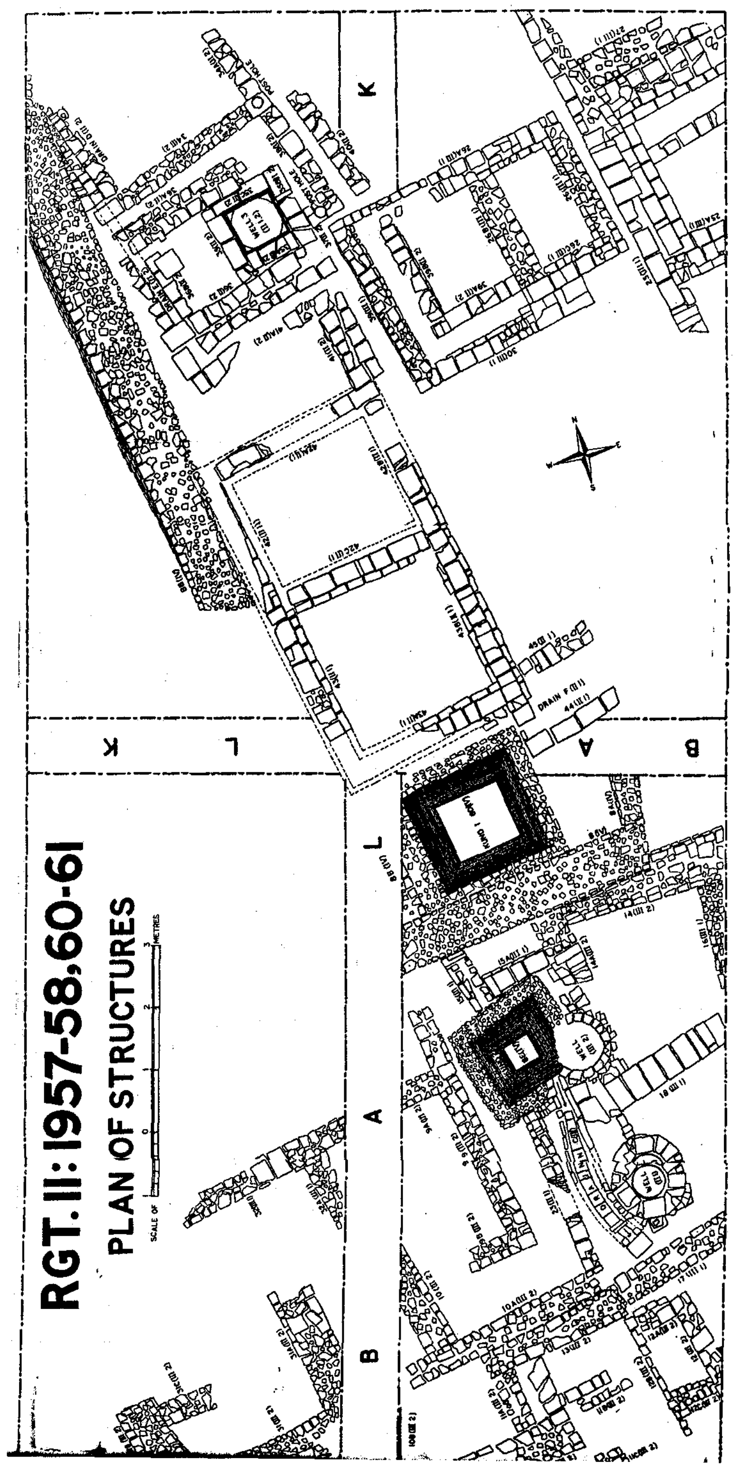


Figure 22: Rajghat, Trench RGT II (after Narain and Roy 1976)

wooden platform was uncovered on the bank of the Ganga River. The excavators reported:

> In the last year's cutting, the outer slope of the massive clay structure was further traced up to a height of 4.24 m. from its base, exposing wood-remains all over the trench. It was noticed that a 25 m. thick layer of ash, charcoal and potsherds intervened between the defences and the wood remains. A cross-sections of the wood remains in one of the corners revealed that, despite heavy decomposition, its thickness varied from 3 to 5 cm. The smooth laying of the wooden planks in the nature of a platform and their possible stretch to a length of 34 m., from the present cutting along the bank of the Ganga, leads on to infer that the structure served as an ancient wooden platform. As a result of rise in the level of the Ganga and consequently deeper penetration of the floodwater, this wooden platform fell in disuse and floods became a source of constant danger to the city. It was at this stage that a massive clay embankment was built as a defensive measure against floods; it was not planned to be a regular fortification, a fact which is corroborated by three more cuttings laid in the same alignment (IAR 1964-65: 45).

It took another couple of years for the excavators to come to the conclusion that Rajghat might not have had a rampart at all, for the trial trenches dug in various locations around the site revealed no traces of fortifications whatsoever. The revised picture thus was quite different. Sub-period I had three structural phases. In Phase 1, a wooden platform was constructed along the bank of the Ganga. In Phase 2, around 500 BC a massive embankment was built between the river and the settlement in order to protect the settlement against floods. In Phase 3, the embankment was enlarged and renovated (Narain & Roy 1976: 22-24). Besides the embankment, the only other structure that could have possibly carried a defensive function was a channel on the northern side of the settlement. In the first phase of its construction, it was almost 8 meters wide at the top and about 2.4 meters deep. Later, it was widened to about 37 meters (IAR 1961-1962: 58) at the top. The excavators nevertheless argued that it was a channel, "not a full-fledged moat" (Narain & Roy 1976: 58).

Thus, the construction of massive structures at Rajghat – the wooden platform and the embankment – was roughly contemporaneous with the advent of the NBPW. As far

as the nature and function of these structures are concerned, the situation remains unclear. Narain and Roy never established the actual size of the settlement. It is not however impossible that the site was bigger than the excavated areas and the remains of the rampart on the eastern and western sides are still to be found. Also, the shift in interpretation makes one wonder whether the revised explanation is credible. If the massive structure between the site and the river was indeed the embankment, what was the function of a channel on the northern side of the site? Judging from its extraordinary width (37 meters) it must have been either a moat or a water reservoir.

In sum, in spite of many seasons of excavations at Rajghat much remains to be done. I strongly believe that circumvallation is to be found. The Ganges is a powerful river and a short embankment would not have sufficiently protected the site from floods, particularly when the site is located in the immediate proximity to the water.

Authority: The beginning of Period II around third or second centuries BC marked several significant changes in the cultural history of Rajghat (see figure 22). During Period I, structural activities were minimal. Besides the wooden platform and the embankment, excavators spotted a number of pits, post-holes, terracotta ring-wells, mud-floorings and occasional mud-walls. No complete rooms or house plans were detected. On one occasion, the remains of a kacha street were established (Narain & Roy 1976). The use of mud plaster and the presence of reed impressions in several pits led the excavators to propose the existence of reed houses plastered with mud (Narain & Roy 1976: 23). Towards the end of Period I, the first copper-cast coins appeared and moulds began to be used for the production of figurines. During Period II, burnt brick replaced mud and mud brick in construction. Structural remains of this period were characterized

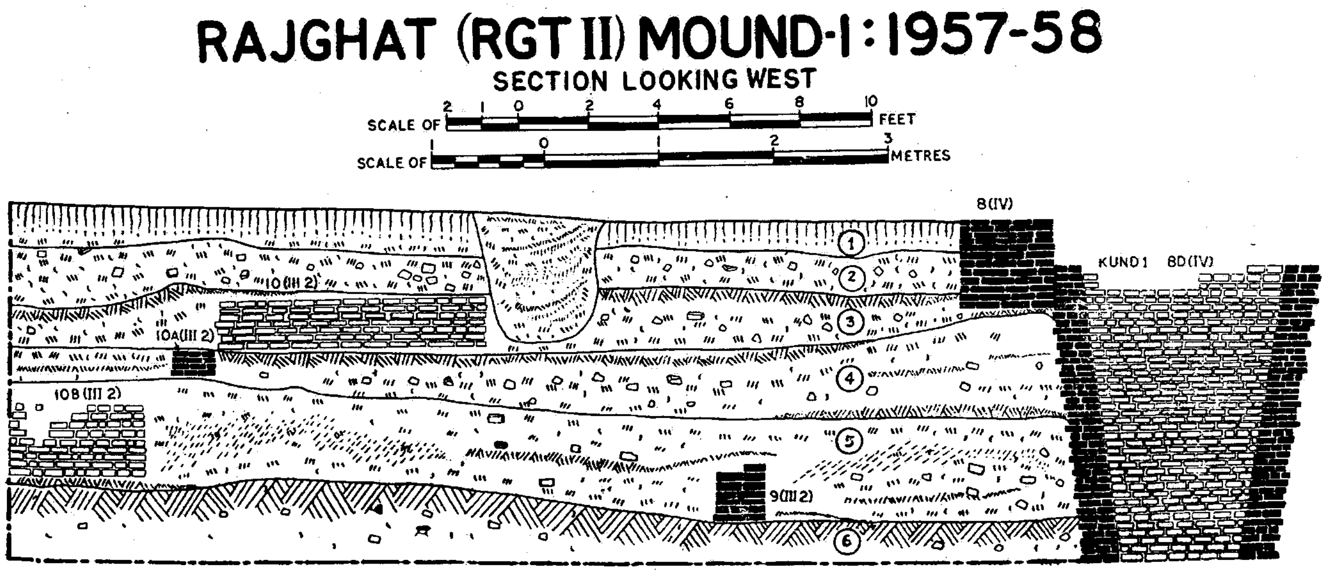


Figure 23: Section of Trench RGT II (after Narain and Roy 1976)

by high standing burnt-brick walls, complete rooms and houses, foundations made of brickbats and mud, sanitary soakage jars with perforated bottoms, drains and bathing platforms. Houses were arguably built according to cardinal directions. In one of the trenches, a whole domestic unit was excavated. It consisted of two rooms with a doorway, a vestibule, an internal well, a bathing platform and an attached drain. Among other innovations, Period II saw the introduction of seals and sealings. A large variety of terracotta figurines, coins, arrowheads, points, beads and other artifacts also characterized this period. Unfortunately, many of these artifacts are not presented in a way that would allow tracing important changes from a temporal perspective. For example, on several occasions, the excavators mention the presence of bone arrowheads and points. Yet they do not specify their exact numbers and stratigraphic context. Figurines are presented from a typological and artistic perspective but changes that must have taken place in different cultural periods are not clearly specified. As far as pottery is concerned, the excavators point to the spread of large size vessels of more utilitarian shapes in Period II as compared to Period I. Finally, the excavators argue that Period II was characterized by a significant population growth and settlement expansion (Narain & Roy 1976: 26). It is not exactly clear on what data this assumption is based since the deposits of both Period I and Period II are present in the majority of excavated trenches. Overall, traits of Period II seem to provide some evidence for the emergence of authority in Rajghat. This means that before the third or even second century BC, Rajghat was a relatively insignificant rural settlement.

Rajgir

References: IAR 1953-1954:9; 1954-1955:16-17; 1957-1958:11; 1958-1959:13; 1961-1962:6-8; 1962-1963:5-6; 1974-1975:10-11; Ghosh 1951, 1958, Jackson 1914, Kuraishi 1956, Marshall 1909, Mate 1969-1970, Narayan 1983, D. N. Sen 1918.

Introductory remarks: Rajgir, or Rajagrha, is located in Bihar in the district Nalanda, southwest of Biharsharif (see figure 24). Judging from the literary sources it had been the capital of Magadha until the fifth century BC when the capital was moved north to Pataliputra. The remains of ancient Rajgir are thought to consist of two parts: Old Rajgir and New Rajagrha. Both parts have been sporadically explored and excavated since the middle of the nineteenth century. A. Cunningham, J. Marshall, V. H. Jackson, Bloch and D. R. Sahni excavated and surveyed at Rajgir at the turn of the twentieth century. As a result of these explorations, good maps of the site and fortifications were compiled. A number of structures of the Mauryan, Kushana and Gupta periods were identified and excavated. Yet no systematic culture history of the site was generated.

In 1950 A. Ghosh carried out a small-scale excavation by the inner defenses of Old Rajgir. Based on this excavation, he defined a sequence of four cultural periods (Ghosh 1951: 70-72):

Period I > 5th cent BC	Crude and Coarse Red Ware;
Period II 5th – 2nd cents BC	NBPW
Period III 1 cent BC	Red ware
Period IV 1 cent AD	Thick jars & bowls of bright tc color

His analysis was based exclusively on the scraping of a six-meter high section cut by a stream at the foot of the Vaibhara Hill.

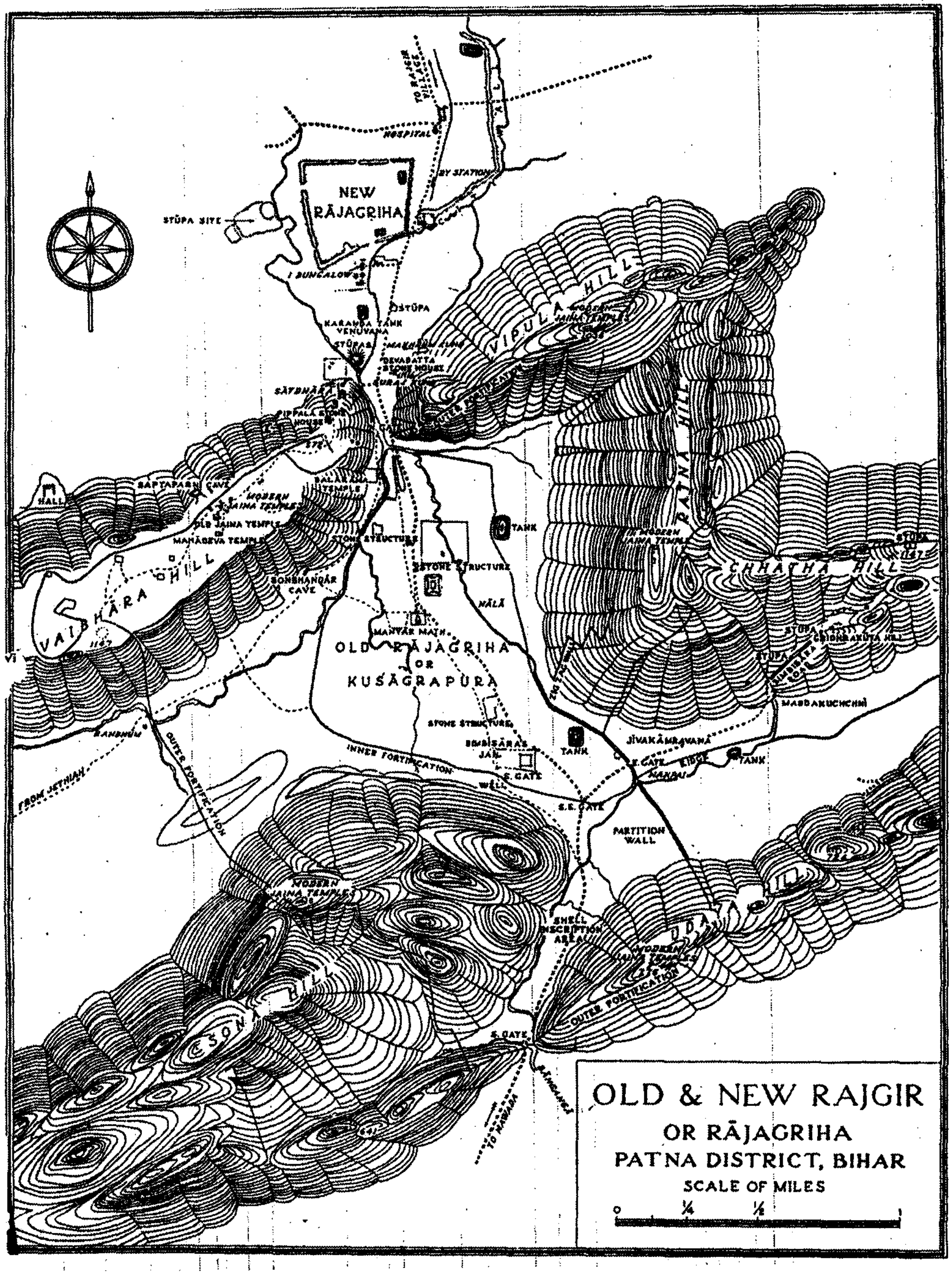


Figure 24: Plan of Rajgir/Rajagrha (after Ghosh 1958)

In the early 1960s, R. Singh conducted a more substantial project at Rajgir. He laid out a long trench across the defenses of New Rajagrha and defined a sequence of three cultural periods:

Period I	Pre-defense occupation, NBPW
Period II	Mud-rampart with a brick wall on top of it
Period III	The renovation of the defense system

Although the main criterion for Singh in defining cultural periods was the modification in the system of defenses, he reconfirmed his chronology on several locations, including the habitation area (IAR 1962-1963: 5-6).

On the whole, the archaeological remains of Rajgir remain very poorly known. First, it is still not clear whether a distinction between Old and New Rajgir, first suggested by A. Cunningham, is appropriate. As Patil justly noted, there is not a single mentioning of two Rajgirs in the literary sources (Patil 1963: 435-436). Furthermore, the uncovered structures of both Old and New Rajgir are very poorly dated, which means that there is absolutely no proof that Old Rajgir is older than New Rajgir. Second, if Rajgir was indeed the first capital of the kingdom of Magadha, it must have left remains of a large and prosperous settlement datable to the 6th century BC. No such remains have been so far discovered. Today, Rajagrha is a bustling resort for Indian tourists, which apparently complicates further excavations.

Fortification and authority: Looking at the maps of Rajgir and surrounding areas, one sees a truly grandiose network of inner and outer fortifications (see figures 24, 25). The outer walls run for about forty km over the surrounding hills. They are made of massive stones that were carefully adjusted and bonded together. The maximum height of

these walls is about 12 feet. On the average however, they reach 7-8 feet. The thickness of the walls is about 15 feet. There are several rectangular bastions. The chronology of these walls is controversial, yet most scholars place their initial construction before or in the Mauryan Period. The structural history of these walls is, to my knowledge, completely unknown.

The structural history of the internal fortifications is better known. In 1961-62, R. Singh of the ASI laid out a 66-meter long and 5-meter wide cutting across the southern defenses at New Rajgir. The excavation was carried to a depth of 18 meters below the extant top of the defenses. As mentioned above, a sequence of three structural periods was defined: (IAR 1961-62: 6-8). The main finds of Period I included the NBPW, Red ware of medium-to-fine fabric, terracotta figurines, copper objects and punch-marked coins. The final layers of this period reportedly contained evidence of conflagration. Period II saw the construction of a mud-rampart, a brick parapet wall and a moat. Singh distinguished two structural sub-periods within this period. In Sub-Period A, the rampart and moat were built. The main extant part of the rampart was 7.3 meters high. The southern side of the rampart was retained by a brick wall. On the top, the rampart was covered with mud and brickbats. Sub-Period B saw the construction of a brick parapet wall on top of the rampart (IAR 1961-62: 7). Period III had two Sub-periods and was defined by several consecutive renovations and enlargements. The chronology of this fortification complex is confusing. Based on pottery and other finds, the excavator placed Period II in the sixth and fifth centuries BC (IAR 1961-62: 8). A radiocarbon sample from the pre-defense Period I (!) however gave the date of 245±105 BC (IAR 1962-1963: 5).

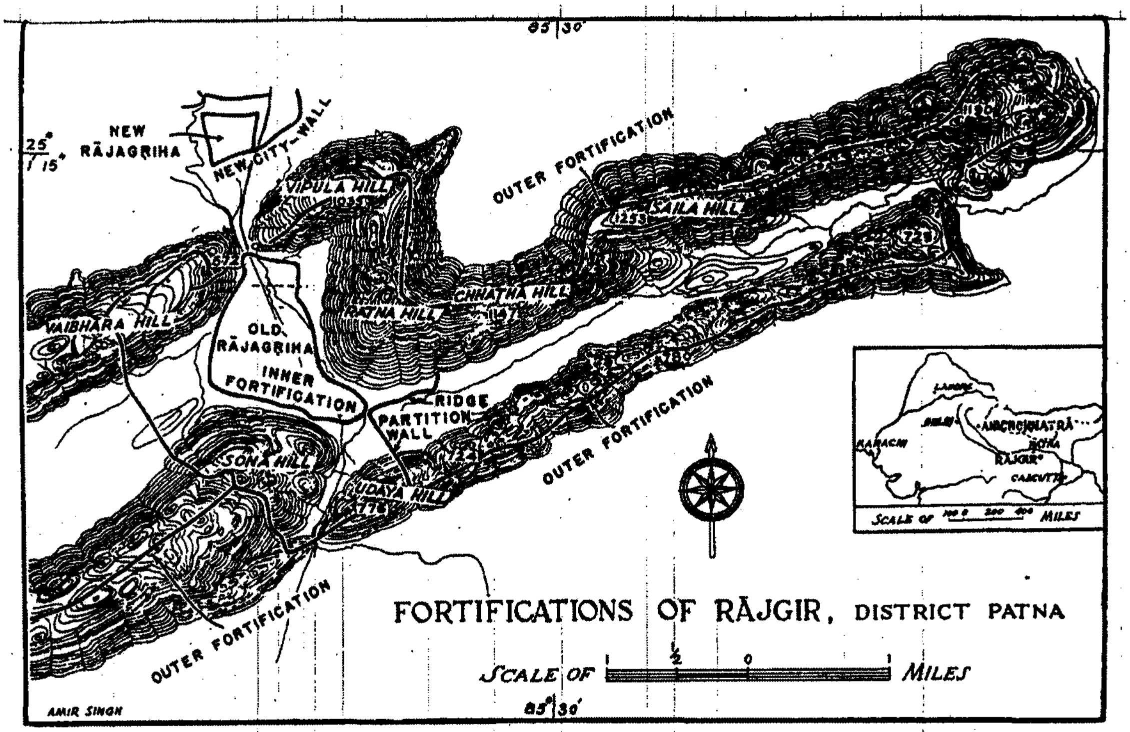


Figure 25: Fortifications of Rajgir (after Ghosh 1958)

The function of fortifications at Rajgir is not as clear as it may first seem. There are three sets of fortifications: the outer fortification, the inner Old Rajgir fortification, and the New Rajgir fortification. The scale of the outer fortifications is truly unique. No other early historical site in Northern India has such a long system of walls. Built of massive and carefully trimmed stones on top of high hills, these walls must have required a very significant consumption of time and labor. Given the role that Rajgir played in the political history of Northern India according to the texts, it is reasonable to assume that the sole reason for the construction of such an elaborate network of fortifications was military conflict. Indeed, as the first capital of Magadha, Rajgir was involved in several

military conflicts during the sixth and fifth centuries BC. Under Bimbisara and his son Ajatashatru, Magadha waged at least three important wars: with the kingdom of Anga, with the kingdom of Kosala, and with the confederacy of Vrijji. Nevertheless, the complexity of the three-leveled fortification system of Rajgir seems to exceed its military needs. The internal ramparts and parapet walls surrounded by high hills with narrow passes must have provided sufficient defense without long and massive outer fortifications. In fact, Rajgir was the only early historical site in Northern India which had such an advantageous location from the viewpoint of defense. Furthermore, if the outer fortification wall had been built prior to the transfer of the capital from Rajgir to Pataliputra, one would expect for the fortification system of Pataliputra to have been at least as powerful as the fortification system at Rajgir; for in the fifth century, military conflicts between the Janapadas intensified yet the location chosen for Pataliputra was more vulnerable than the location of Rajgir. If the outer wall had been built after the transfer of the capital from Rajgir to Pataliputra, one would still expect for the fortification system of Pataliputra to have been more powerful; for after the transfer of the capital the center of power, trade and military defense would have certainly gravitated towards the capital. Texts and archaeology nevertheless show the opposite. Wooden palisades that surrounded Pataliputra (see above) clearly did not match the strength and elaboration of the fortification system of Rajgir.

The magnitude of the defense system of Rajgir thus appears to have been militarily unjustified. In my opinion, it is likely that the construction of the outer fortifications was motivated by a combination of military and symbolic concerns. Considering that Rajgir gave birth to a consecutive chain of dynasties, one of which

eventually united northern South Asia under the imperial rule, it is not unreasonable to suggest that its fortifications played a certain role in the glorification and solidification of authority. Moreover, fortifications are currently the only archaeological proof of authority in Rajgir during the pre-Mauryan and Mauryan periods.

Authority: From the literary sources, we know of Rajgir as an important political, cultural and religious center. As early as in the sixth and fifth centuries BC, Rajgir was famous for its religious and philosophical schools. As well, it was intimately connected with the activities of Buddha and Mahavira. Even if a small percentage of what the texts tell us is true, Rajgir must have been a flourishing and bustling settlement by at the latest the sixth century BC. Unfortunately, besides the remains of fortifications, archaeology of Rajgir does not provide any data to prove this assumption. The cultural sequence of Rajgir formulated by Ghosh is useless for tracing the emergence of authority. The results of the excavation conducted by the ASI under Singh are slightly more informative, yet not sufficient for tracing the emergence of authority either. In Rajgir, there are many architectural remains having to do with authority, yet all of them date to the later periods. In fact, most Buddhist monuments, the remains of which can be currently seen in Rajgir, belong to the period between sixth and eleventh centuries AD.

The case of Rajgir thus is intriguing. The site of great history, it has so far provided nothing to reconfirm its fame except for a massive and elaborate fortification system. This fortification system epitomizes authority and complexity of Rajgir prior to the Mauryan and during the Mauryan periods.

Sonkh

References: IAR 1966-1967:41-43; 1968-1969:40; 1969-1970:42-43; 1970-71:39-40; 1971-1972:47-48; 1972-1973:33-35; Hartel 1989, 1993.

Introductory remarks: Sonkh is located in the Mathura district, about 30 km southwest of Mathura (see figure 26). It is a relatively small site. The size of the original site was estimated at approximately 200,000 sq. m. Today, the extant mound occupies an area of approximately 320 × 280 m (Hartel 1993: 13). H. Hartel of the Berlin Museum of Indian Art carried out eight seasons of excavations at Sonkh during 1966 to 1974. Based on both vertical and horizontal exposures in several areas of the site, he defined a continuous sequence of periods from the PGW of ca. 8th century BC to the Jats of the 17th – 18th centuries AD (Hartel 1993: 17).

Period I	800 – 400 BC	PGW, BRW, post-holes, no walls
Period II	400 – 200 BC	NBPW, mud and mud brick structures
Period III	200 – 100 BC	Mithras, Red Ware, baked brick structures, planning
Period IV	100 BC – AD 100	Ksatrapa and Ramdata, Red Ware, baked brick
Period V	AD 100 – 300	Kushanas, red ware, much architecture, temples
Period VI		Gupta to Early Medieval
Period VII		Medieval
Period VIII		Moghuls to Jats

The results of the excavation at Sonkh are very well recorded and published.

Fortifications: In association with Period I, Hartel reported the remains of a ditch system and possibly a rampart. Hartel proposed that these remains constituted "part of an enclosure… anticipating the elements of later defensive works" (Hartel 1993: 25),

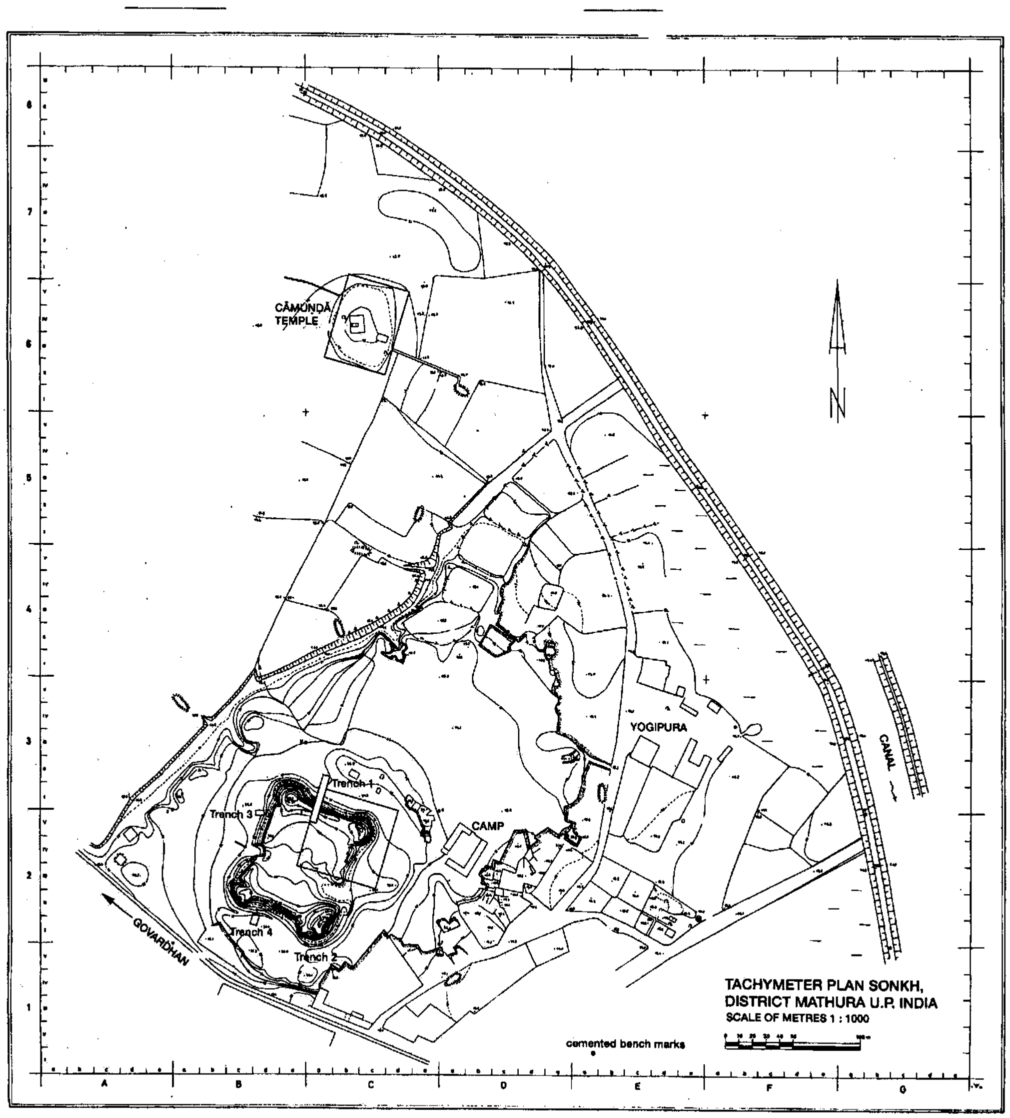


Figure 26: Plan of Sonkh (after Hartel 1989)

yet were insufficient for assuming "a fortification like that of the early historical time with its parapets and ditches of bigger extent." Interestingly enough, none of the later periods until the very last one revealed any traces of fortifications. Sonkh had no defense system until the advent of the Mughals and Sher Shah.

Authority: Owing to the excellent report on the excavation at Mathura by Härtel, the cultural history of Sonkh is well defined and provides good potential for investigating the emergence of authority. One of the defining elements of this cultural history is the structural activity. Following the excavation report, one can subdivide the early structural history of Mathura into four main periods, each defined by the construction material:

1. The Period of Wattle-and-Daub Structures: The construction of wattle-and-daub structures was characteristic of Period I or the PGW in Hartel's chronology and dated to ca 800-400 BC. The existence of wattle-and-daub structures was deduced on the basis of post-holes and reed impressions (Hartel 1993: 19-25).

2. The Period of Mud-Wall Structures: Construction from mud was characteristics of all but one level of Period II or the NBPW in Härtel's chronology and consequently dated to ca 400-200 BC.

3. The Period of Mud-Brick Structures: The use of mud brick began in the very end of Period II and lasted for a short period of time in levels 29 and 28. It dated roughly to the end of the Sunga Period and the beginning of the period of the local states in Northern India (Hartel 1993: 85).

4. The Period of Baked Brick Structures: Baked brick became the main construction material soon after the beginning of Period III around the second century BC.

Out of these four periods, the fourth one marked the most important changes in the life of Mathura. Besides the use of baked brick, the overall architectural layout of the settlement during this period became drastically different from the preceding periods. For example, the regular planning of houses and residential units was introduced: a standard

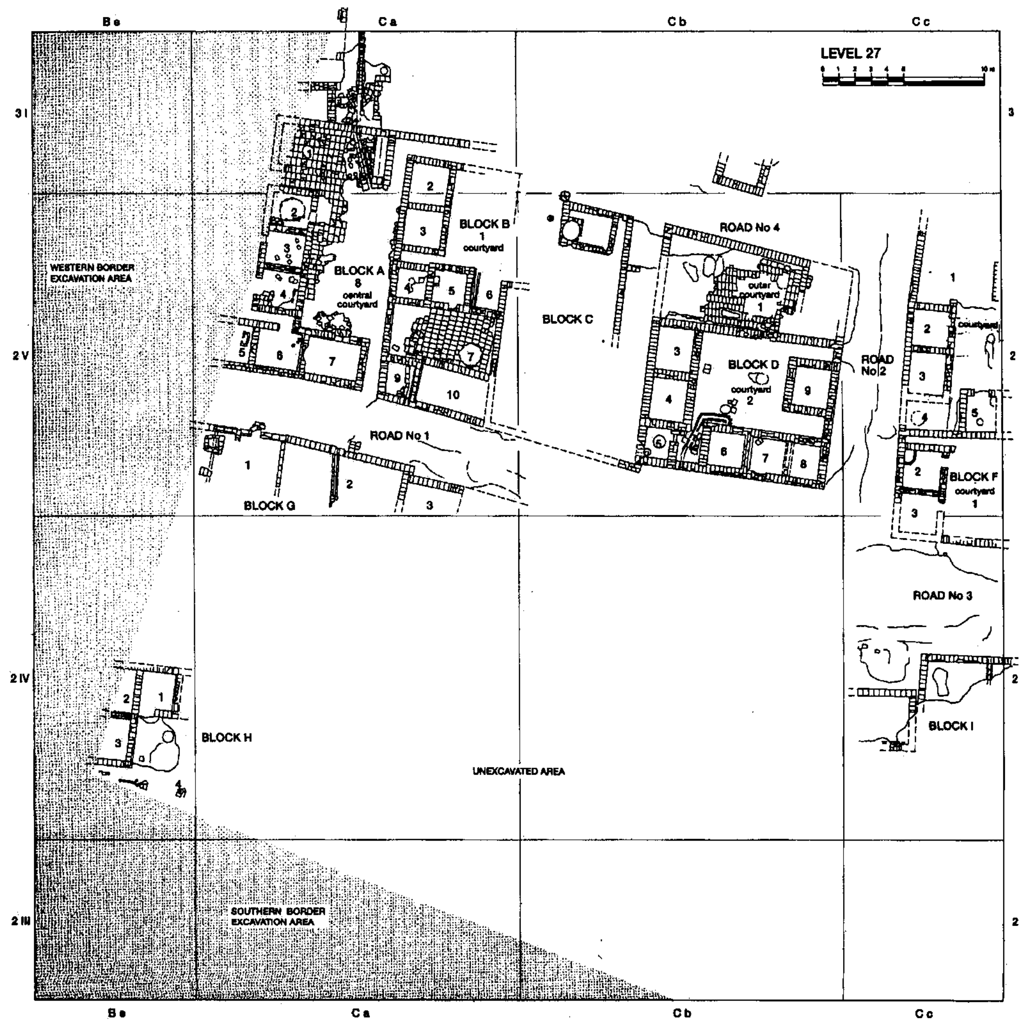


Figure 27: Sonkh, Level 27 (after Hartel 1989)

house plan now included several rooms grouped around an inner courtyard. Terracotta ring-wells were placed inside the houses. Tiles and pinnacles were used for the construction of gable roofs. Besides changes in architecture, this period was characterized by inscribed copper coins and seals, new weapons and iron tools, terracotta human plaques and votive tanks, as well as many other innovations and artifacts. Most

importantly however, all of these changes seem to have been directly related to the political situation in neighboring Mathura. Layer 27 (ca 2nd century BC), in which the changes begin to take place, is contemporaneous with the reign of Suryamitra, one of the most important rulers from the dynasty of the Mitras of Mathura. Many clearly identifiable coins, found in good context in Layer 27, support this chronological correlation. The excavator characterizes the remains of Layer 27 as indicators of major transformations (see figure 27). On one occasion, he notes that "the solidity and comfort of structures as well as the abundance of finds" from this layer "create an impression of a great prosperity" (Hartel 1993: 85). On another occasion he seems to imply that Layer 27 marks the beginning of the urban phase in the history of Sonkh. In his view, "the time of the mud-brick constructions in the Sonkh Mound is the formative phase of the early "urban" settlement" (Hartel 1993: 33). This of course implies that the use of baked brick marks the beginning of an urban settlement.

Leaving aside Hartel's comment about the urban nature of the settlement – I discuss this issue in the end of the chapter – what one can conclude at this point is that the transition to Layer 27 of Period III provided the first clear and convincing evidence for the presence of authority at Sonkh (see figure 27).

Sonpur

Reports and references: IAR 1956-1957:19-20; 1959-1960:14; 1960-1961:4-5; 1961-1962:4-5; 1970-1971:5-6; Patil 1963, Sinha & Verma 1977.

Introductory remarks: Sonpur (sometimes Sonepur or Sonitpur) is a small site, located south of Patna in the district Gaya, Bihar. Some researchers identify it with the capital of Bana, Sonitapura, mentioned in the Epic and Puranic literature. No convincing evidence however has been provided to substantiate this claim. In 1956, the Jayaswal Research Institute of Patna together with the Directorate of Archaeology and Museums, Bihar, began the excavation at Sonpur. During the next several seasons, they exposed large areas of the site and defined a cultural sequence of three consecutive periods.

Period IA	BRW	ca 1100 – 1000 BC
Period IB	Fine BRW	ca 1000 – 650 BC
Period II	NBPW	ca 650 – 200 BC
Period III	Post-NBPW	ca 200 BC – AD 200

The absolute dates of this sequence are very speculative. For example, Period I is dated on pure conjecture. Dates for Period II are borrowed from the report on the excavation at Hastinapura by B.B. Lal. Dates for Period III are approximated from the discovered coins (Sinha & Verma 1977: 12).

Fortifications and authority: No fortifications were found in Sonpur during the excavation by the Jayaswal Research Institute. With regard to authority, the results of Sonpur excavation are also negative. Structural activities are minimal until Period III (ca. 200 BC-200 AD). Period IA reveals no structural activities whatsoever and the excavators assume that the houses must have been made of perishable materials such as reed and leaves. Period IB has circular lime floors and circular pits. Based on their shape and quantity, the excavators hypothesize that circular huts were built during this period.

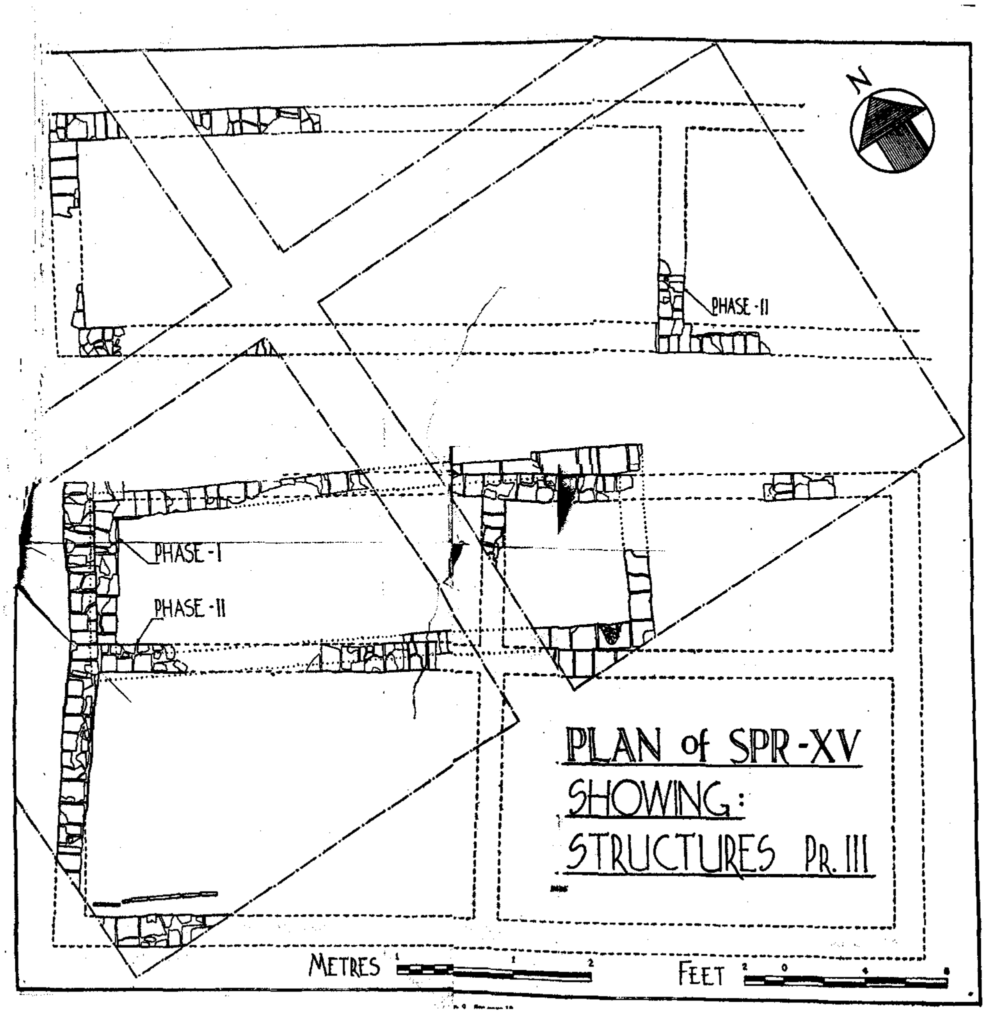


Figure 28: Sonpur, Period III (after Sinha and Verma 1977)

Likewise, several post-cremation pit burials from this period have a circular shape. Period II has traces of a mud wall, a platform and several terracotta ring-wells. In Period III, burnt brick is introduced and several structures made of burnt brick are found in the upper levels of this period (see figure 28). Yet no complete room or a house has been excavated (Sinha & Verma 1977: 10-11). The first coins appear during Period II. Of 108

discovered coins, 48 are from stratified context. Of these 48, 16 belong to the deposits of Period II and 32 to the deposits of Period III (Sinha & Verma 1977: 89). There are three types of coins: punch-marked coins, die-struck copper coins and uninscribed cast copper coins. Importantly, there are no inscribed coins. There are quite a few terracotta sealings, yet there are absolutely no seals. Of the total of 41 sealings, 39 come from stratified layers. Inscribed sealings indicate the names of individuals, divinities or places. Most of these seals belong to Period III (Sinha & Verma 1977: 99-100). Most terracotta figurines come from Period III (Sinha & Verma 1977: 115). Most beads are associated with Periods II and III (Sinha & Verma 1977: 101). There are quite a few arrowheads, styli, and pins. Interestingly enough, the majority of them come from Period I (Sinha & Verma 1977: 130). As far as the size of the settlement is concerned, the plan of the mound is not provided. The exact size, save for an approximate height, is not reported either. Nonetheless, based on the information about the cuttings, some conclusions can be made with regard to the expansion of the site. It appears that during Period IA, the site was very small. Of the thirty excavated trenches, only three (SPR VII, VIII and IX) revealed the deposits of Period IA. Moreover, these three trenches were located right next to each other in the center of the northern mound (Sinha & Verma 1977: 15-16) and occupied an area of 106 square meters. By Period IB, the settlement significantly expanded and, judging from the excavated trenches, stayed as such until the end of occupation. The deposits of Periods IB and II were detected in all thirty trenches. The deposits of Period III were detected in twenty-nine trenches.

In summary, the cultural history of Sonpur does not provide any sufficient evidence for the presence of authority at least until Period III or even during the entire

occupational sequence: structural activities are minimal throughout all the periods; in size, the settlement stays unchanged in Periods II and III; seals and inscribed coins, often seen as an important indicator of authority, are completely absent; and there is a clear dearth of signs of drastic changes in sociopolitical complexity. The excavators claim that the scale of excavation was responsible for at least some of these shortcomings (Sinha & Verma 1977: 11). For a small site however, thirty trenches covering an area of 905 square meters are not a small-scale horizontal exposure! In my view, the results of the excavation at Sonpur by the Jayaswal Institute must be seen as quite representative.

Sravasti / Saheth-Maheth

Reports and references: IAR 1958-1959:47-50; 1986-1987:76; 1987-1988:106-108; 1988-1989:82-84; 1991-1992:102-104; 1992-1993:91-92; 1995-1996:76-82; Aboshi et al 1999, Gaur 1983, Hoey 1892, Law 1935, Marshall 1914, Mate 1969-1970, Sinha 1967, Venkataramayya 1956, 1981, Vogel 1908.

Introductory remarks: Sravasti is a very large site, located in the districts of Gonda and Bahraich, not far from the border between India and Nepal (see figure 29). According to literary tradition, it was one of the two capitals of Kosala, a *janapada* that played an important role in early Indian history. The archaeological remains of Sravasti are scattered on two sites, Saheth and Maheth that are separated from each other by a small strip of land. Saheth is a Buddhist establishment; Maheth is a large fortified city. The history of explorations at Saheth and Maheth goes back to the middle of the nineteenth century. In 1863, A. Cunningham briefly explored these two sites and identified them with the city of Sravasti, known from Sanskrit and Pali literature. W.

Hoey followed Cunningham by exploring the site first in the mid 1870s and then in the mid 1880s. In 1908, J. Ph. Vogel began the first systematic archaeological excavation at Saheth and Maheth. He reconfirmed Cunningham's identification with Sravasti and compiled the first and so far the only (!) comprehensive map of the site (see figure 29). In 1910-1911, J. Marshall and D. R. Sahni conducted excavations at Saheth. In 1959, Sinha of the ASI excavated at Maheth. Finally, Kansai University in collaboration with the ASI has carried out excavations at both Saheth and Maheth since 1986.

Based on the most recent excavations, the cultural sequence of Saheth begins with the Sunga Period around the first century BC, and the cultural sequence of Maheth with the Black and Red Ware Phase (BRW) in the beginning of the first millennium BC. There are two cultural sequences of Maheth, that are worth mentioning: the first one formulated by Sinha based on his excavation in 1959; the second one formulated by the Kansai University – ASI team based on their most recent excavation. The first sequence consists of three periods (Sinha 1967: 7-16):

Period I	ca < 275 BC	Pre-defense
Period II	ca 275 – 50 BC	NBPW, PBW, Defenses
Period III	ca > 50 BC	The site largely deserted

The second sequence consists of five periods (Aboshi et al 1999: 135):

Period I	ca < 6th cent BC	BRW
Period II	ca 6th – 4th cent BC	Early NBPW
Period III	ca 3rd – 1st cent BC	Late NBPW
Period IV	ca 1st – 3rd cent AD	The Kushanas
Period V	ca 7th – 8th cent AD	The Post-Gupta

The ASI in collaboration with Kansai University is currently continuing its excavations at Maheth.

Fortifications: Maheth is surrounded by a massive rampart with a brick wall on top of it. The length of the rampart is about 5.2 km (see figure 29). The area enclosed by the rampart is almost 160 hectares. According to recent excavations, the maximum width of the rampart reaches 36 meters and the maximum height reaches 7 meters. Cunningham, Hoey and Vogel explored the fragments of the rampart, yet it was K. K. Sinha who in 1959 carried out the first recorded and stratigraphic excavation of it. Sinha laid a trench (SRV I) measuring 120 by 12 feet across the northern side of the rampart. Based on this trench he defined a sequence of five structural phases, all of which belonged to Period II. In Phase I, the basal width of the rampart was 90 ft. and the maximum height was 7 ft.[46] Phase II, did not witness any significant renovations. Yet based on the presence of "a heterogeneous deposit consisting of pottery dump," Sinha suggested that during this phase the area of defenses was used as a "temporary dumping ground" (Sinha 1967: 18). During Phase III, a wide brick wall was built on top of the rampart. During Phase IV, the height of the mud-rampart was raised further up. Phase V saw the construction of a brick wall right over the rampart filling of phase IV. According to Sinha, there was no time gap between phases IV and V (Sinha 1967: 19).

To verify Sinha's sequence, Kansai University in collaboration with the ASI has recently re-excavated the rampart. The new sequence is generally in agreement with that

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[46] One must note that a report published in the IA gives different dimensions. The basal width is 95 ft and maximum height is 12 ft (AI 58-59: 50)

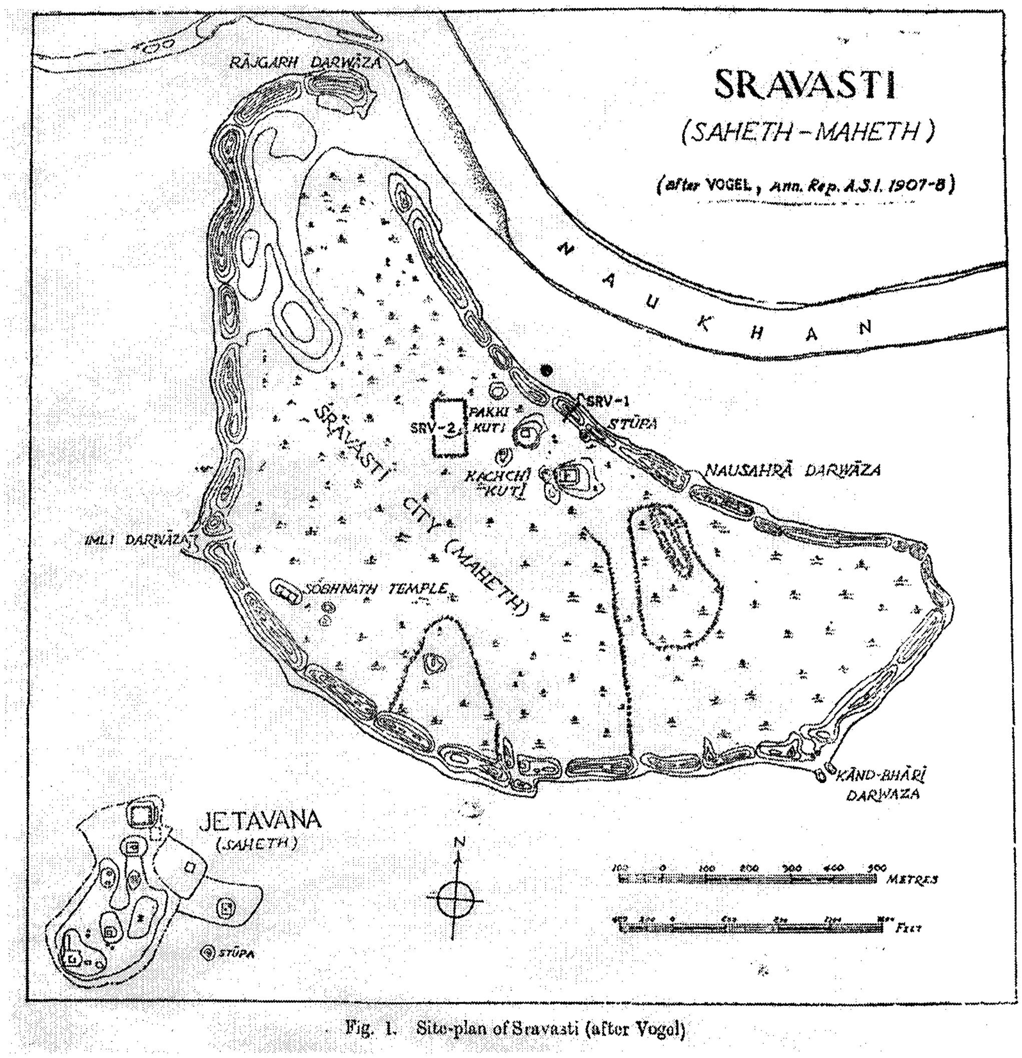


Fig. 1. Site-plan of Sravasti (after Vogel)

Figure 29: Map of Sravasti (after Marshall 1914)

of Sinha's. Most importantly, Sinha and Aboshi seem to agree on the date of the initial construction of the rampart; Period II of Sinha's chronology and Period III of Aboshi's chronology are placed roughly in the 3rd and 2nd centuries BC. The difference between the two sequences is that Aboshi dates the construction of the brick wall on top of the

rampart by the second half of his Period IV (ca 3rd century AD), while Sinha dates the same wall by his Period II.B (ca 2nd century BC).

As far as the function of fortifications is concerned, neither Sinha nor Aboshi have proposed any explanations. The existing data are nonetheless sufficient for a preliminary hypothesis. Six following traits are particularly revealing.

1. The rampart had many wide openings located at similar intervals from each other. None of these openings revealed the remains of gates.

2. In Phase I, the rampart was low and had a very gradual slope.

3. In Phase II, the rampart was arguably used as a 'dumping area'.

4. There are signs of occupation beyond the rampart.

5. The rampart was built during the Mauryan period, after the struggle for power between the janapadas was over.

6. The parapet wall was built either during the late Mauryan period or in the third century AD.

What unites all these traits is that, according to them, neither military defense nor protection from floods can sufficiently explain the function of the rampart. Wide openings and the gradual slope made the rampart vulnerable. The use of the rampart as a dumping area makes no sense from a military perspective. The fact that the rampart was built well into the Mauryan period is odd given the history of the military conflict in Northern India. Finally, if Aboshi is right in dating the wall on top of the rampart by the third century AD, this means that the major strengthening of the fortification system was carried out past many important military conflicts.

Given all these, it is reasonable to suggest that the rampart at Maheth performed a symbolic rather than practical function. The division and circumvallation of space based on ideological principles would perfectly explain the wide openings at regular intervals as well as other military impracticalities during the first two structural phases. The presence of the walled monastery and other occupational deposits in the proximity to the rampart would also make perfect sense if the function of the rampart were to symbolically divide the space rather than to protect the site from floods or military attacks. To conclude, the rampart at Maheth did not protect the site from floods or a military threat. At least during its early structural phases, it must have carried a function that had to do with delineation of space based on some ideational principles.

Authority: Although Sinha's project was quite modest in scale – he excavated only one trench, 15 by 36 feet, in the habitation area – it produced sufficient results for tracing the major transition in the cultural history of Sravasti. This transition took place between Periods I and II of Sinha's chronology. Period I had no structural remains, no coins, no inscribed seals. Its material culture was defined on pottery, beads, terracotta figurines, terracotta discs and glass bangles. The transition to Period II brought several important innovations. Burnt brick architecture laid in mud-mortar was introduced (Sinha 1967: 19-20). Red ware became mass produced, simple and utilitarian (Sinha 1967: 41-46). Human figurines appeared for the first time and became one of the defining characteristics of this period (Sinha 1967: 52-57). Most arrowheads came from the deposits of Period II (Sinha 1967: 69-71). Finally and most importantly, inscribed seals (Sinha 1967: 71) and coins (Sinha 1967: 73-77) appeared for the first time. Based on all these data, Sinha suggested that the changes that had taken place by Period II "might

have been brought about by a central authority" (Sinha 1967: 9). One must agree with Sinha; for even given the small scale of excavations, burnt-brick structures, inscribed seals, coins and mass-produced pottery were undoubtedly indicative of the emergence of authority.

The excavation by the joint ASI-Japanese team reconfirmed Sinha's conclusions. Of the three excavated trenches, the one at Suraj Kund (Area A) revealed the entire cultural sequence from Period I to Period V. Period I and II, which were contemporaneous with Sinha's period I, revealed minimal structural activities such as pits of various sizes and hearths (Aboshi et al 1999: 138). The transition from Period II to Period III, being almost exactly contemporaneous with the transition from Period I to Period II in Sinha's chronology, brought important changes. The deposits of Period III revealed workshops of an iron maker, glassmaker and stone bead maker (Aboshi et al 1999: 138). Period IV, also contemporaneous with Sinha's period II, disclosed the first burnt brick structures, domestic complexes with internal courtyards including a storeroom of roof tiles (IAR 1995-1996: 76-82; (Aboshi et al 1999: 138-140). As far as other objects of material culture are concerned, Aboshi does not specify exact numbers, types and stratigraphic contexts. Nonetheless, Aboshi recognizes that Period III marked several radical changes in the life of the site (Aboshi et al 1999: 165).

Both excavation projects thus unambiguously show that archaeological evidence for authority in Sravasti emerges by the third century BC.

Vaisali

Reports and references: IAR 1957-1958:10-11; 1958-1959:12; 1959-1960:14-16; 1960-

1961:6; 1961-1962:5-7; 1974-1975:11; 1988-1989:9; Bloch 1904, Deva & Mishra 1961, Mate 1969-1970, Mishra & Roy 1964, Patil 1963, Sinha & Roy 1969, Spooner 1914.

Introductory remarks: Vaisali or Basarh is located about twenty-two miles north of Patna, Bihar. According to literary tradition, it was the capital of the republic of Licchavis and was founded by King Visala of the Iksvaku lineage. Vaisali comprises several localities, the most known of which is Raja-Visal-ka-Garh, a rectangular fortified mound measuring ca. 500 by 240 meters (see figures 31, 32). Other important localities are Kharauna tank, Buddhist stupa, Bhimsen-ka-Palla, Chakramdas, Baniya, Lalpura and Virpur (see figure 30). Vaisali has a long history of excavations. Most of these excavations have been well published. In 1903-4, T. Bloch took on the first substantial excavation project at Vaisali. Spooner continued his work in 1913-14. In 1950, Krishna Deva and Misra carried out a season of excavations on the site of Raja-Visal-ka-Garh. The most extensive archaeological exploration of Vaisali was carried out on behalf of K. P. Jaysawal Research Institute in 1958-1962. Finally, in 1988-89, B.K. Sharan conducted a small-scale project on Raja-Visal-ka-Garh.

As far as chronology is concerned, there are two main sequences: one defined by Deva and Mishra, and another one by the Jayaswal Research Institute. Deva and Mishra distinguished four periods (Deva & Mishra 1961: 5-7):

Period IA	500 – 300 BC	NBPW, BRW, and Red Ware; structures of mud and bamboo; traced only on the site of Chak Ramdas
Period IB	300 – 150 BC	NBPW, Grey Ware, structures of square brick, the earliest occupation on the Garh Area and the latest at

		Chak Ramdas; simple structures of square brick
Period II	150 BC – AD 100	The time of efflorescence, artistic activity, well-planned single course structures
Period III	AD 100 – 300	Red Ware, carnelian beads, brick structures on top of the brick concrete
Period IV	AD 300 – 600	Red Ware, brickbats, Gupta terracottas and sealings in Brahmi script

The main deficiency of this sequence is that it is based exclusively on the data from Raja-Visal-Ka-Garh; other localities were left unexcavated. The sequence defined by the Jayaswal Research Institute is more inclusive; it is based on the data from several localities and comprises five periods (Sinha & Roy 1969: 7-8):

Period I	< 600 BC	Coarse Black & Red Ware, Pale-Red Wares
Period II	600 – 200 BC	NBPW
Period III	200 BC – AD 200	Red & Grey Wares; Sunga seal/ings, coins, figurines
Period IV	AD 200 – 600	Gupta terracotta seal/ings and figurines
Period V	> AD 600	Pre-Mughal Glazed Ware

I will be referring to these two sequences interchangeably.

Fortifications: The mound of Raja-Visala-ka-Garh is rectangular in shape and measures roughly 500 by 240 meters (see figures 31 and 32). Its height varies from 2 to 3 meters and its slopes evince a regular sharp pattern. Even to an unaccustomed visitor, Garh gives the impression of being fortified. The first excavators of Garh, A. Cunningham and T. Bloch sensed this, yet failed to show the existence of defenses archaeologically. Following their steps, T.B. Spooner concluded that no "ancient

masonry ramparts" ever existed in Vaisali (Spooner 1914: 103). Spooner however deserves some credit as he did notice the accumulation of sandy soil at the edge of the mound. He called it "an earth embankment" and inferred that this embankment was "all the circumvallation that the site possessed" (Spooner 1914: 103). It took another several decades until Deva and Mishra finally spotted a complex defense system at Vaisali in 1950.

In a trench laid across the western edge of the mound (VS III), they uncovered a mud-rampart of more than 65 feet in width and over 9 feet in extant height. On top of the rampart there was a mud-brick structure. Deva and Mishra placed the construction of the rampart in Period IB dated to ca 300-150 BC. A mud-brick wall, in their view, was constructed later to "prevent erosion of the hump of the rampart" (Deva & Mishra 1961: 13-14). The Jayaswal Research Institute continued the study of defenses at Vaisali in 1958-62. Several trenches were laid in the southeastern corner of Garh with the sole purpose of investigating the defenses. Trench VSG II produced the best results. Based on the excavation of this trench, three structural phases were defined (IAR 1958-59: 12; (Sinha & Roy 1969: 25-26). The first phase saw the construction of a baked brick wall and was dated to the beginning of Period III of the revised chronology, ca. 2nd century BC. The wall reportedly measured 20 ft in thickness. The second phase witnessed the digging of a moat and the erection of a rampart. The rampart was 68 feet in width at the base, 21 feet in width at the extant top and 13 feet in extant height. At some point before the third phase, the rampart had been destroyed. Based on a sealing discovered in a post-rampart layer, the construction of the rampart was dated to the 1st century BC. During the third phase, a brick-defense wall, about 9 feet thick, was built on top of the rampart. In

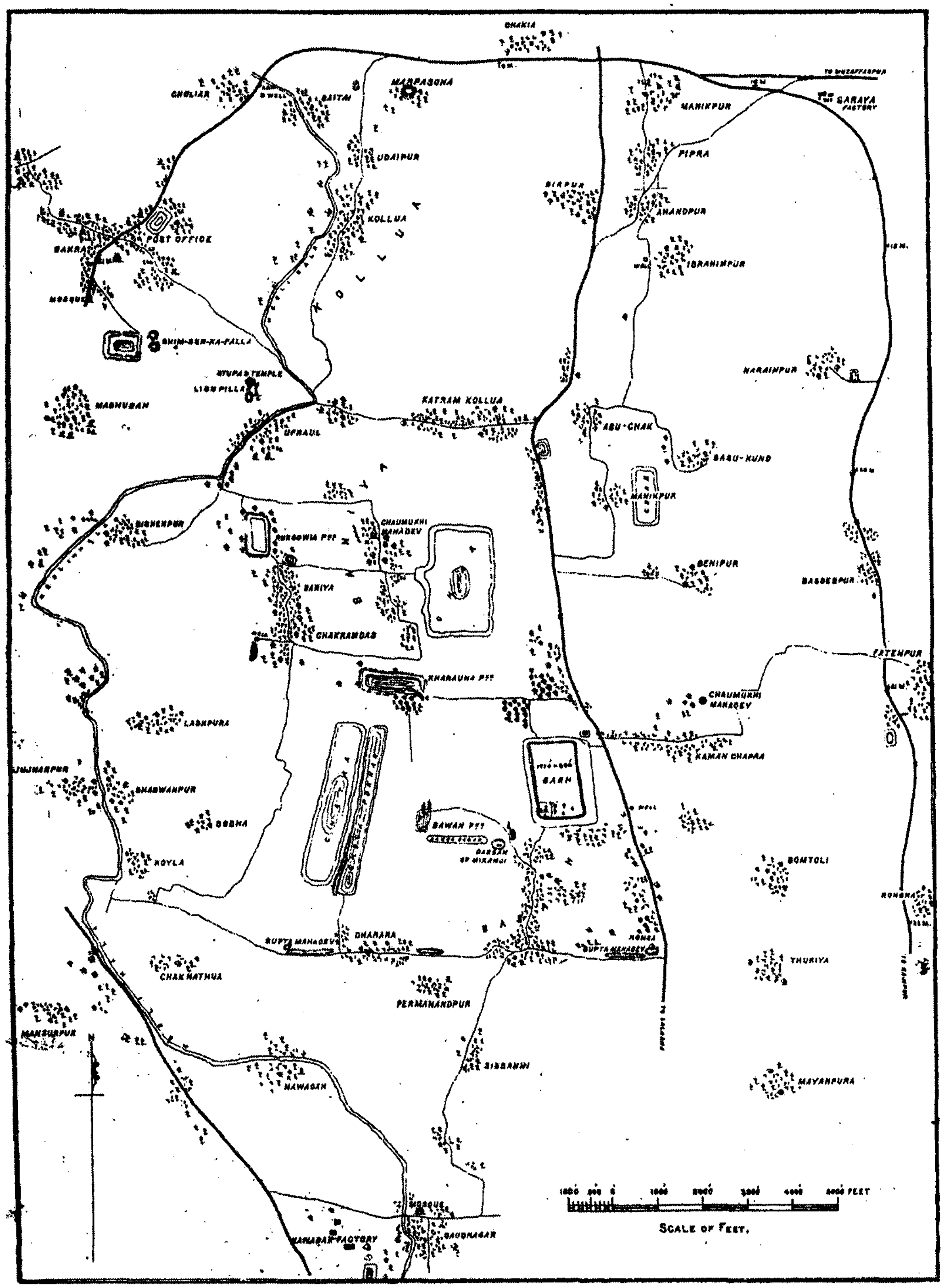


Figure 30: Sketch Plan of Vaisali and the Adacent Areas (after Sinha and Roy 1969)

association with this phase, a group of similar structures was uncovered. Judging from a large number of weapons found in these structures and from the proximity of defenses, they called these structures 'military barracks' (Sinha & Roy 1969: 27-28). The construction of the wall and the barracks were dated roughly to the time of the late Kushanas or the early Guptas. These results were verified on other locations, including a trench on the western side of Garh (VSG XVIII) (IAR 1959-1960: 14-15). All the trenches revealed similar structural sequences.

Fortifications at Vaisali thus present an intriguing case. Three points are particularly important. First, fortifications at Vaisali appear to have been built relatively late, in the beginning of the Sunga period around the second century BC. Second, the structural history of fortification at Vaisali is quite unusual; the construction of a brick wall precedes the construction of a rampart and moat and not the vice versa. Third, the relationship and the degree of integration between separate localities of Vaisali – Raja-Visala-ka-Garh, Kharauna tank, Buddhist Stupa, Bhimsen-ka-Palla, Chakramdas, Baniya, Lalpura and Virpur – are very unclear. Are all these localities parts of a single entity or they are separate sites? No one, to my knowledge has properly addressed this question yet everyone treats these sites as innate parts of Vaisali. In my view, the nature of the relationship between these localities is directly related to the function/s of fortifications on Raja-Visal-ka-Garh. If the mound of Raja-Visala-ka-Garh represented only one district of Vaisali, the rampart must have carried a segregative or symbolic function. If the localities in fact were isolated from each other, the rampart may have carried a defensive function.

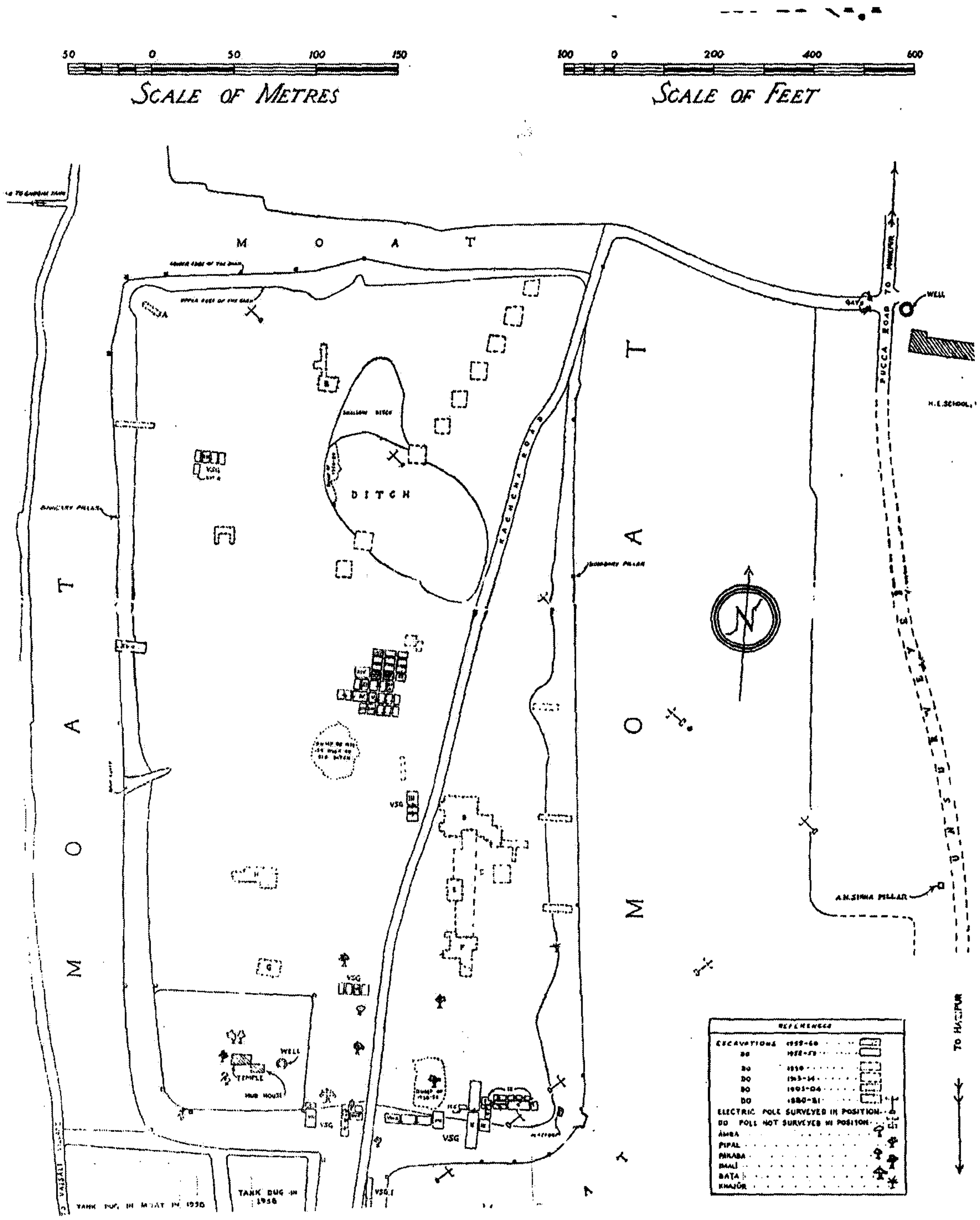


Figure 31: Raja Visala ka Garh (afer Sinha and Roy 1969)

In this respect, it is worth mentioning a hypothesis proposed by Sinha and Roy. Based on the reading of several seals, Sinha and Roy suggested that Garh was a market place rather than a palace or a fort. As they asserted, "it was wise to make a market place on a comparatively higher ground that the surrounding ground level, so that the place might not become damp and spoil the articles stored therein". Consequently, "the ramparts in different periods were nothing but strong revetments of this artificial elevated ground" (Sinha & Roy 1969: 118). If Sinha's and Roy's suggestion is correct, the function of fortifications on Raja-Visala-ka-Garh was very unusual. Taking into consideration the proximity of localities to each other as well as the small size of Raja-Visala-ka-Garh, I tend to believe that the localities of Vaisali were parts of one entity. Under this scenario, its fortifications did not carry a military or ecological function, but rather symbolically marked the border of an important locality. Whether this locality was a market, an administrative center, a palatial complex or something else remains an open question.

Authority: Cultural sequences defined for Vaisali by different excavators reveal similar patterns of the emergence of authority.

According to the sequence of Deva and Mishra, Period I A (ca. 500-300) has no structural activities and is encountered only on the site of Chak Ramdas. Period IB (ca. 300-150 BC) evinces the earliest occupational phase on the site of Raja-Visala-ka-Garh, yet structural remains and other artifacts that could mark the formation of complex social organization and the emergence of authority are still lacking. Period II (150 BC – 100 AD) is the first to show significant changes in several aspects of material culture. In architecture, it is characterized by burnt-brick houses with the use of the English bond

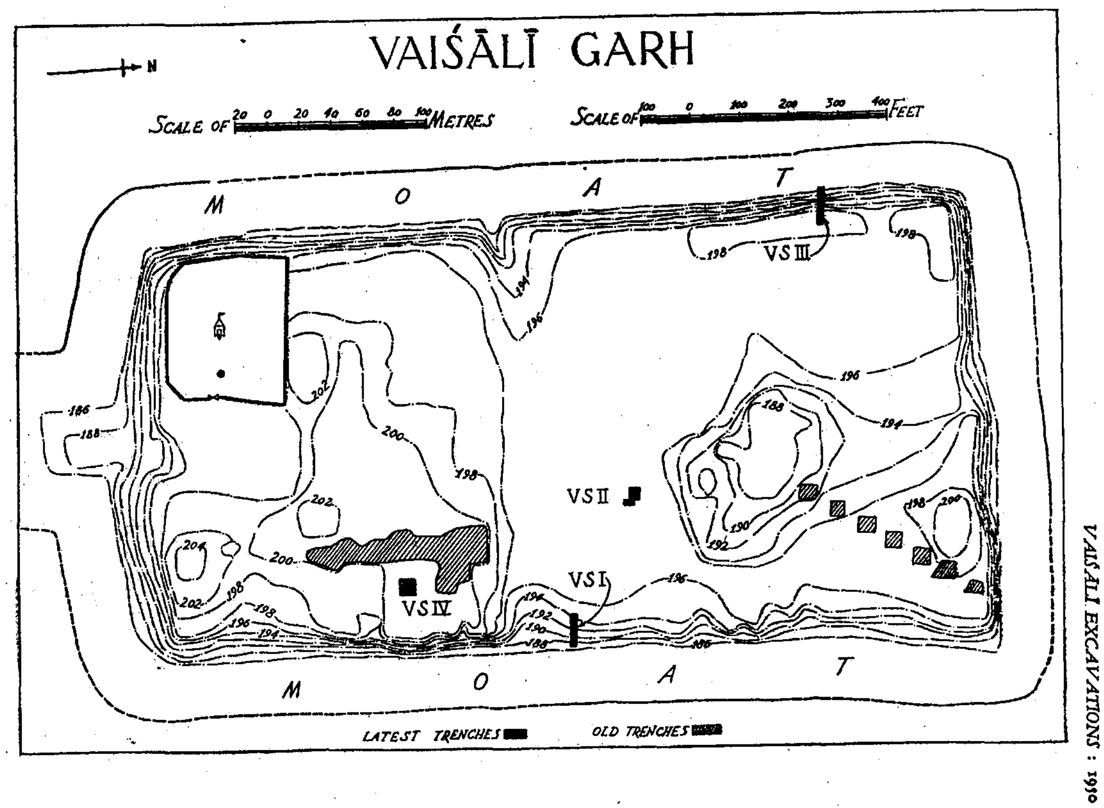


Figure 32: Raja Visala ka Garh, Excavations (after Deva and Mishra 1961)

technique in foundations (Deva & Mishra 1961: 11-13). In pottery, the NBPW gradually disappears giving place to red and buff wares. Mass production, simplicity and standardization seem to become the main characteristics of ceramic production during this period (Deva & Mishra 1961: 18). Among other noticeable innovations, the emergence of human figurines and coins must be mentioned.

In the cultural sequence defined by Sinha and Roy, changes become evident by Period III (ca. 200 BC – AD 200). For example, on Raja-Visala-ka-Garh, there are no structural activities until Period III. As the excavators assert, "hardly any structure was

encountered even in the latest phase of Period II" (Sinha & Roy 1969: 29). Based on coins, terracotta figurines, pottery, seals, as well as on the comparison with other mounds of Vaisali, the excavators justly suggest that Raja-Visala-ka-Garh was established around the third century BC (Sinha & Roy 1969: 118). Later, during the second and first centuries BC, the structures such as the complex of "military barracks" were built (Sinha & Roy 1969: 26-28). The establishment of two other important localities of Vaisali, Kharauna tank and Bhimsen-ka-Pala, is also associated with the transition from Period II to Period III (Sinha & Roy 1969: 9-16, 33-35). Based on coins and terracotta figurines, the dating of initial construction activities on these sites by the beginning of the Sunga Period is quite reasonable. The localities of Vaisali on which the earlier period are present are Chak Ramdas, Baniya, Lal Pura and Virpur. None of these sites, however, have revealed any structural activities, coins, seals, or any other signs of complex organization and authority (Sinha & Roy 1969: 35-39).

Seals and sealings, one must say, are one of the most abundant and most obvious signs of authority in Vaisali. Most of them are from the Garh area. Seals found during the early excavations by Bloch and Spooner are out of context and stratigraphy. Seals found during the excavation by the Jayswal Research Institute are relatively well recorded (Sinha & Roy 1969: 110-131). Of the ninety-eight discovered seals, sealing and tokens, eighty-six come from the Garh area. The nine earliest seals, sealings and tokens date to the end of Period II, i.e. the Mauryan Period. They all have been found on Raja-Visala-ka-Garh and in the area of Kharauna Tank. Sixteen seals, sealings and tokens belong to the Sunga period and they also come from Raja-Visala-ka-Garh and Kharauna Tank. Most of the remaining seals, sealings and tokens belong to Period IV, i.e. the Kushana

Period (Sinha & Roy 1969: 114). Many seals and sealings directly point to the presence of authority. Sealing #10, for example, instigated the aforementioned hypothesis of Raja-Visala-ka-Garh being a fortified market place or commercial center (Sinha & Roy 1969: 116-119). Sealing #7 was interpreted as belonging to a government functionary at Vaisali during the time of the Mauryas (Sinha & Roy 1969: 115). A fragment of the sealing #11 carried the name of king Agnimitra, the son and heir of Pursyamitra Sunga. Sinha and Roy proposed that this seal indicated the Sunga's sway over Vaisali (Sinha & Roy 1969: 119). A number of seals, sealings and tokens belonged to random individuals, merchants and officials. For example, the legend of token #19 was translated as "of the chief counsillor" (Sinha & Roy 1969: 120).

To conclude, archaeological evidence for authority emerges in Vaisali not earlier than the Mauryan Period. Judging from the structural history, it is likely to have emerged in the beginning of the Sunga period. This was the time when the site expanded, Kharauna tank was built and the vigourous construction activity began on the mound of Raja-Visala-ka-Garh.

Conclusion: The Idea of the Gangetic City

Of the thirteen reviewed Gangetic sites, most are fortified and contain evidence for authority. The specificities of the emergence of authority and of the structural history of fortifications on these sites reveal some interesting regularities. I discuss these regularities under two broad themes: the function of fortifications and the nature of authority. These two themes in turn lead me to the main question: whether the model that

I have extracted from Sanskrit and Pali texts in the previous chapter is able to contribute to our understanding of the phenomenon and the idea of the Gangetic city.

The function of fortifications: In his report on the excavation at Sravasti, K. K. Sinha asserted that the defenses in North India were "constructed as a measure against the threat of Indo-Greek invasion" (Sinha 1967: 11). Sinha's view is representative of a significant amount of scholarly literature. Military conflict and floods are still seen as the key factors in the construction of defenses on the sites of the Ganges Civilization. I believe this view is erroneous. The archaeological data reviewed in this chapter have demonstrated that warfare and protection from floods were by far not the only factors that motivated the construction of fortifications on the Gangetic sites and that the meaning and functionality of these fortifications were much more complex. At least nine of the thirteen reviewed sites are fortified. Hastinapura, Sonkh and Sonpur have no fortifications. The case of Rajghat is questionable. As I mentioned above I believe it has a circumvallation, yet at this point we do not have a solid proof of it. Out of the nine fortified sites, *five provide strong evidence in support of a symbolic function of their fortification systems*. These sites are *Kausambi, Mathura, Rajgir, Sravasti and Vaisali*. Let me reiterate the main points of my argument that have led me to this important conclusion (see table 6 and figure 33).

The scale of fortifications in Kausambi is striking. Particularly massive are the walls, revetments and bastions in the southwestern corner and on the eastern side of the site. Yet from the viewpoint of military defense, both the layout and size of the Kausambi fortification system raise serious doubts. On the one hand, the size of some ramparts and bastions clearly exceeds military demands of its time. On the other hand, some traits of

layout and structural history are inefficient from a military point of view. For example, there are many long gaps in the ramparts; the ramparts significantly vary in size; and most importantly the initial rampart did not encircle the whole site.

Fortifications at Mathura are massive and surround the site from the west, north and south. Moreover, from literary sources we know that Mathura was directly involved in military conflict. Nonetheless, neither military nor ecological considerations sufficiently explain the construction of fortifications at Mathura. First, the bank of the Yamuna River was left unprotected. Second, during the period of political unrest portions of the wall were covered with occupational deposits. Third, from the time of its initial construction the rampart was smoothly incorporated into the natural landscape.

Rajgir has the longest and one of the most elaborate fortification systems of all the reviewed sites. Besides the two massive internal forts, it is encircled by a stone wall that runs for about 40 km over the adjacent hills. The construction of this massive fortification system must have required a very significant expenditure of labor, time and authoritative control. Its complexity however seems to exceed the military needs of Rajgir. As we know from the literary sources, in the fifth century BC the capital of Magadha was moved from Rajgir to Pataliputra. This happened as military conflict intensified. Hence, if the outer wall were built prior to the transfer of the capital from Rajgir to Pataliputra, one would expect the system of defense in Pataliputra to be stronger or at least comparable in strength with the system of defense at Rajgir. If the outer wall were built after the transfer of the capital, one would still expect the system of defense in Pataliputra to be stronger; for with the transfer of the capital the center of political and military gravity would have certainly moved to Pataliputra. Texts and archaeology nevertheless

show the opposite. The system of defense in Rajgir is clearly more elaborate and labor consuming to build than the wooden palisades of Pataliputra.

Sravasti consists of two parts: the Buddhist establishment of Saheth and the city of Maheth. Maheth is surrounded by a rampart with a brick wall on top of it. Despite of the massive size of this rampart, there are many indicators of its non-military use. First, the rampart had too many wide openings to make the defense of the site effective. Second, during the first two structural phases (ca 3^{rd} – 2^{nd} cent BC), the rampart was low, its slope was gradual and at some point it might have been used as a 'dumping ground'. Third, the site of Saheth is not well protected and there are numerous signs of occupation beyond the rampart of Maheth. Finally and most importantly, the current dating of the rampart places its initial construction in the third century BC, i.e. after the struggle for power between the janapadas was over and a significant portion of Northern South Asia was united under the rule of the Mauryas.

Vaisali comprises a number of localities scattered around the large area. No trace of a fortification system that would enclose all of these localities has been discovered. The only locality that has a circumvallation is Raja-Visala-ka-Garh, a rectangular mound measuring approximately 500 by 240 meters. This circumvallation was built around the second century BC and consisted of a rampart, a moat and a brick wall. The construction of a brick wall however preceded the construction of a rampart and a moat. Since Raja-Visala-ka-Garh is only part of Vaisali, the function of its circumvallation must be approached in terms of the relationship between Raja-Visala-ka-Garh and other localities.

Such is a brief summary of my argument in support of the symbolic function of fortifications on the five aforementioned sites. In short, this argument can be presented in a list of six distinctive traits:

1. The excessive monumentality of ramparts, bastions and revetments.

2. The militarily impractical layout of ramparts expressed in wide openings and large unprotected areas.

3. Inefficient military characteristics of ramparts such as low height and gradual slopes.

4. The alleged disuse of ramparts in certain periods expressed in the creation of dumping areas and the construction of buildings on top of ramparts.

5. Chronological incongruity between the construction of fortifications and the history of military conflict in Northern India, i.e., the construction of fortifications in the periods of a relative political stability and the absence or disuse of fortifications in the periods of active military conflict.

6. The presence of habitational areas beyond the fortifications.

Each of the five aforementioned sites reveals at least several of these traits; two sites – Mathura and Sravasti – reveal all of them. Moreover, fortification systems of these five sites are characterized by structural similarities. Massive ramparts, parapet walls with gaps and wide openings are characteristic of most of these sites. This in my view makes a strong case for a certain pattern in the functionality of the Gangetic fortifications. As I have argued above, fortification systems of these five sites performed symbolic functions. By symbolic I mean non-military, non-ecological and non-utilitarian. Now we can go a step further by suggesting that the symbolism of

Table 6: Major Modifications of the Gangetic Fortifications[47]

Ahicchatra	Rampart	Parapet wall with gaps	Wall plastered gaps filled
Atranjikhera	Rampart	Tower and walls	Parapet wall with gaps
Bhita	Rampart	Parapet wall with gaps and bastions	
Kausambi	Revetted Rampart	Guardrooms, towers and parapet walls	
Mathura	Rampart	Inner fortifications	
Pataliputra	Wooden walls		
Rajghat	Wooden platform	Embankment	
Rajgir	Rampart Outer stone wall	Parapet Walls	
Sravasti	Rampart	Parapet wall with gaps	
Vaisali	Burnt brick wall	Rampart and moat	Parapet wall with gaps

fortifications on these five sites was similar. Similarities in design, use, structural history and other traits seem to support this argument.

Moreover, the four other fortified sites – Ahicchatra, Atranjikhera, Bhita, and Pataliputra – are likely to follow a similar pattern; for in spite of the lack of data there are

[47] No chronological correlations are implied

indications that the fortification systems of these sites are characterized by similar traits. For example, the rampart at Ahicchatra is excessively monumental, displays military inefficiencies during its early structural phases and is possibly characterized by chronological incongruities with the history of military conflicts. The rampart at Atranjikhera is too small during the first two structural phases and the parapet wall is not built until the end of the Mauryan or even Sunga periods. Bhita is divided into two parts so its rampart must have carried a segregative function. The wooden palisades of Pataliputra are too week to provide an effective military defense of the site which was the capital of the first great South Asian empire and one of the biggest cities of the ancient world.

To conclude, my purpose has not been to completely discard the military or ecological function of the Gangetic fortifications. Warfare and floods may have contributed to the construction of these fortifications. The site-by-site analysis has nevertheless shown that there is much more to the function of the Gangetic fortifications than military defense and protection from floods. From site to site, I have argued that symbolism played an important role in the shaping of the meanings of many if not all of these fortification systems. Interestingly, evidence for authority comes handy as an aid for understanding this symbolism.

The nature of authority: To show the emergence of authority on each of the thirteen Gangetic sites, I have traced drastic and simultaneous changes in their material culture. Ahicchatra, Atranjikhera, Kausambi, Mathura, Rajghat, Sravasti, Sonkh and Vaisali reveal evidence for authority. Moreover, the emergence of authority on these sites can be placed in a chronological context. As far as the other sites are concerned, evidence

is less substantial. Bhita, Pataliputra and Rajgir provide evidence for authority yet the chronology of its emergence is obscure. Hastinapura and Sonpur reveal no evidence for authority whatsoever. From site to site, my argument can be summarized as follows (see figure 34).

Archaeological data from Ahicchatra is very scarce, yet there are changes indicative of authority. These changes include the construction of fortifications, the emergence of brick structures, site expansion, the introduction of coinage, and planning in accordance with cardinal directions. All these changes are attributed to a relatively short period of time and appear in Strata 6 (1^{st} century BC) of the periodization by Dikshit and Ghosh and in Period IV (Kushana Period) in the periodization by Banerjee.

In Atranjikhera, evidence for authority is more abundant. It includes the construction of fortifications, the expansion of settlement, intensification of structural activities, the emergence of brick architecture, the introduction of coinage, increase in weaponry, the appearance of human terracotta figurines, and the manufacture of agricultural tools made of iron. All these changes occur during Phases B and C of Period IV (500-200 BC).

Bhita provides ample evidence for authority. Fortifications, architecture, regular planning, seals and coins point to the presence of authority roughly by the Mauryan period. It is however impossible at this point to reconstruct the precise chronological context for the emergence of authority at Bhita; for the chronology and periodization of this site are basically non-existent.

The archaeology of Hastinapura does not provide sufficient evidence for authority. The size of the site does not increase until period V (AD1100-1500). Structural

activities are minimal until Period IV (200 BC- AD 300). In addition, the deposits of all the structural periods display a striking lack of seals, weaponry and inscribed objects.

In Kausambi, the main criteria for tracing authority are fortifications, architecture and coins. The area of fortifications and the palace is very poorly dated. Hence, the emergence of authority is best traced in the areas of the Asokan pillar and the Ghoshitarama monastery. Each area has its own periodization. In the area of the Asokan pillar major qualitative changes can be attributed to Sub-Period IA (mid 4th century BC). In the area of the Ghoshitarama monastery, changes indicative of authority are associated with the construction of the stupa and are attributed to Phase II (5th century BC).

In Mathura, evidence for authority includes the construction of fortifications, the expansion of the settlement, the emergence of brick architecture, the introduction of coins, the manufacture of human figurines, simplification and mass production of standardized pottery, and hierarchy in the settlement pattern. All these changes are associated with the transition from Period I to Period II of Joshi's periodization (4th century BC).

Pataliputra provides no evidence for authority during the pre-Mauryan period. In the Mauryan period, the only possible indication of authority is the famous Pillared Hall of Kumrahar. The function, archaeological context and structural history of this hall are however poorly understood.

In Rajghat, the changes that are indicative of authority include the emergence of complex burnt brick architecture, seals, sealings, and coins. The changes become evident in the beginning of Period II (3rd – 2nd centuries BC). In Rajgir, the only proof of authority during the pre-Mauryan and Mauryan periods is the fortifications system. In

Sonkh, the emergence of authority is associated with the emergence of baked brick architecture, regular planning of houses and residential unites, inscribed coins, new weapons and iron tools. All these innovations are attributed to Layer 27 (2^{nd} century BC) according to the periodization by Hartel. Sonpur provides no sound evidence for authority during its entire cultural history.

In Sravasti, evidence for authority includes fortifications, burnt-brick architecture, planning of houses and residential units, mass-produced, simple and utilitarian red ware, human figurines, inscribed seals and several workshops. All these innovations are the result of the transition from Period I to Period II in Sinha's periodization and from Period II to Period III in the periodization by Aboshi et al. In both periodizations, this transition takes place around the 3^{rd} century BC.

Finally, in Vaisali the emergence of authority is associated with the construction of fortifications and burnt brick house complexes on Raja-Visala-ka-Garh, with the expansion of the site and the establishment on new neighborhoods, with the production of simplified and standardized Red and Buff wares which gradually replace the NBPW, with the emergence of human figurines, and with the introduction of coinage, seals and sealings. In Deva and Mishra's periodization all these changes occur in Period II (150-100 BC), and in the periodization defined by Sinha and Roy these changes are attributed to the first part of Period III (2^{nd} – 1^{st} cent BC).

Thus, in search for the evidence of authority I have referred to a long list of archaeological traits. This list includes: settlement expansion, intensification of structural activities, the use of mud-brick and burnt brick, the beginning of regular planning of houses and blocks, the minting of coins, the emergence of seals and sealings, the

manufacture of human figurines, the transition to mass produced and simplified pottery, the increase in the amount of weaponry, and emergence of hierarchies in settlement patterns. As evidence for authority, some of these traits are more important than the other. For example, settlement expansion, drastic changes in architecture, and the introduction of seals and coin are the most recurrent. In one way or another, each of these traits is directly indicative of authority. Settlement expansion involves increase in population density. Population density in turn leads to social complexity and the forming of authority. Drastic changes in architecture imply higher social complexity, political organization and the forming of authoritative structures. Coins and seals are direct evidence for authority as they imply complex trade mechanisms and convey ownership rights, political decision-making and the membership in certain political and social groups. In some cases, I have traced simultaneous changes in all of these traits. In other cases, I have used changes in architecture, settlement size and seals separately and in various combinations.

Nonetheless, as evidence of authority many of the aforementioned traits give a sense of deficiency. The changes in architecture although important in the local context are modest on a grand comparative scale. There are clearly no pyramids, palaces and assembly halls on the Gangetic sites. Except for the pillared hall of the Mauryan period at Pataliputra and the poorly dated 'palace' at Kausambi, no large public buildings or temples (save for the stupas) have been discovered. Ritual or authoritative paraphernalia, monumental art and inscribed seals are also absent at least until the Mauryan period. *Under this scenario, what makes my whole argument viable is one archaeological feature, which is present on most of the reviewed sites and whose significance with*

respect to authority makes all other traits meaningful and my argument viable. This feature is the system of fortifications.

There is no doubt that the construction of Gangetic fortifications required organization of labor, a high degree of social complexity and the existence of authority. Most importantly, the very reason to built massive fortifications – regardless of whether it was military defense, protection from floods or, as I have argued above, some form of symbolism – implied the existence of social complexity and authoritative structures. In a sense, fortifications have become an epitome and symbol of complexity, social disparity and authority on the reviewed Gangetic sites. In Rajgir, the stone wall, which runs for more than forty km over several ranges of hills, is currently the only archaeological proof of a sociopolitical complexity prior to the Gupta Period. In Kausambi, colossal bastions, ramparts and revetments surpass in magnitude all other structural remains and constitute the main evidence for authority and control of labor. In a similar way, ramparts, bastions, parapet walls and revetments are the most unambiguous evidence for authority in Ahicchatra, Atranjikhera, Bhita, Mathura, Sravasti, Vaisali and possibly Rajghat.

Thus, the archaeological signature of authority on Gangetic sites is very unusual. In most early complex societies, the presence of authority is evident from monumental architecture, elite burials, luxurious objects of art, writing, seals, and other clear material expressions of power. *The archaeological signature of authority on Gangetic sites rests upon fortifications, settlement size, architecture, regular planning, and seals. Moreover, fortifications play the most important role among these factors.* In other words, authority on the Gangetic sites did not need palaces, temples, rich burials and objects of luxury. It

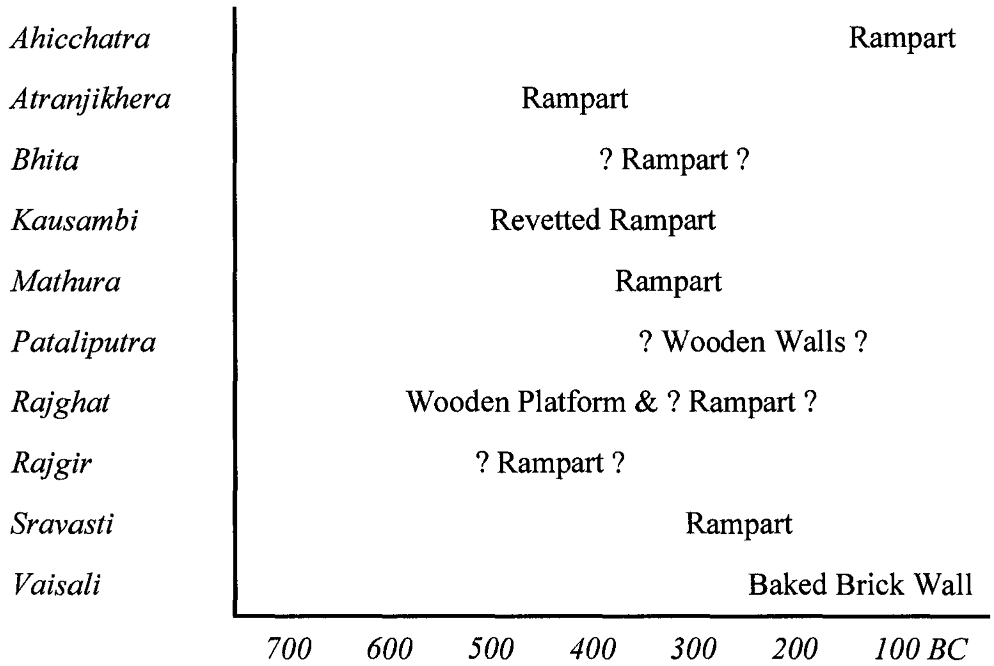


Figure 33: Approximate Dates of Construction of the Gangetic Fortifications[48]

expressed itself by building ramparts, walls, bastions and revetments, whose function was primarily symbolic, not military or ecological.

This unusual expression of power evokes a number of ideas, all of which lead to the same theoretical model. According to this model, *the emergence of authority on Gangetic sites went hand in hand with the formation of new local identities. The delineation of space by ramparts and walls was the first material expression of the division between ours and theirs, internal and external, domestics and alien. This*

[48] The first letter of fortifications – revetted rampart, rampart, wooden platform, etc – designate the approximate date of construction.

shaping of identity, i.e., the emergence of a sense of belonging to a certain place, group, sociocultural entity or any other imagined world, was an impetus and an essential part of the processes of the formation of authority. In other words, the emergence of authority and the formation of territorially bound identities were the two facets of the same process. Materially, this process was expressed in the encircling of significant sites by massive fortifications. Interestingly, many of the Gangetic fortifications had their own original shapes; the top plans of the fortifications at Bhita, Mathura, Sravasti, Vaisali as well as at several other Gangetic sites presented unique and individual patterns. It is not impossible that these patterns were also part of the symbolic expression of local identity. All the reviewed sites that have provided evidence for authority match this model. Even Sonkh, which has no fortifications, falls in the same pattern. Located only thirty km away from Mathura, Sonkh was in the shade of Mathura's political power. Before the rise of Mathura there was an attempt to build a circumvallation at Sonkh (see above). At that time Sonkh was equal to Mathura and its population must have experienced similar processes of the formation of identity and authority. The further rise of Mathura to political power overrode these processes. Sonkh did not develop the form of authority that would need to define its identity by constructing massive fortifications. It is no coincidence that qualitative changes that characterize Level 27 in the cultural sequence of Sonkh were chronologically contemporaneous with the reign of Suryamitra in Mathura (see above).

This model also agrees with the information provided by literary sources. The rise of Janapadas could not be complete without the formation of Janapada identities. Given that most of the reviewed sites were the capitals of janapadas, the notions of space,

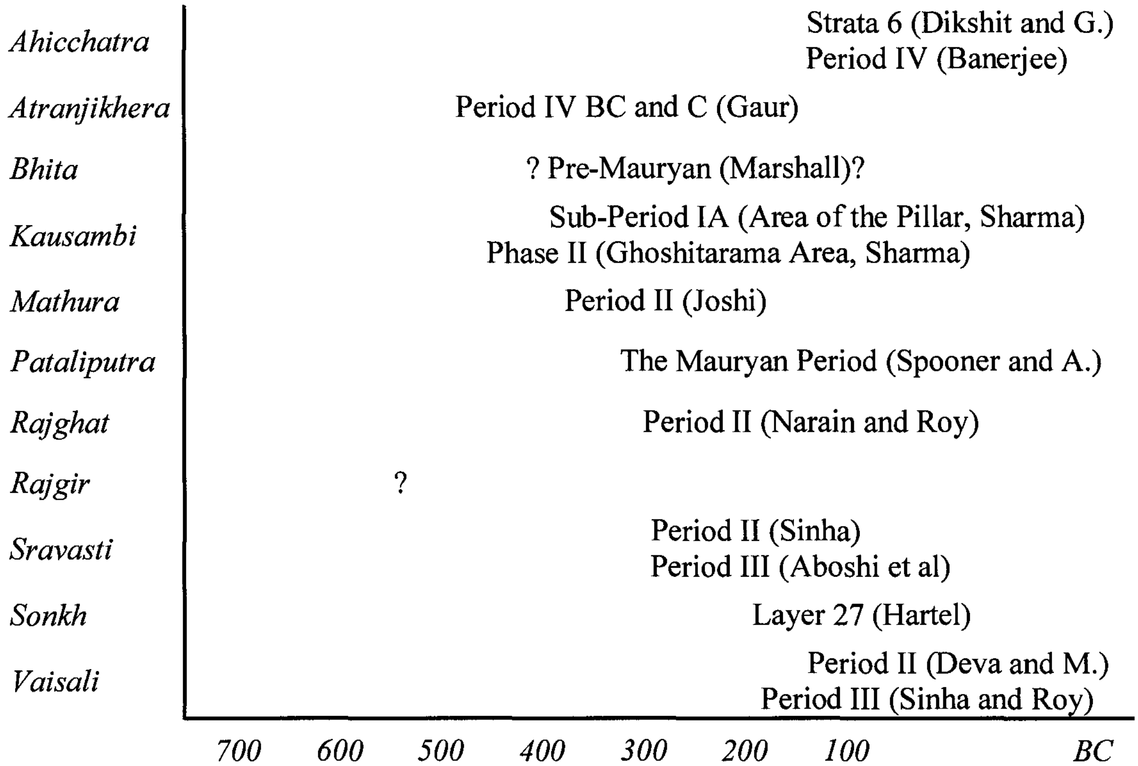


Figure 34: Approximate Dates of the Emergence of Authority on Gangetic Sites[49]

territory and of one's own sociocultural world must have played a key role in this process.

To conclude, it is difficult to reconstruct the precise form of authority on the Gangetic sites from the existing archaeological record. What the current state of data allows us to do is to understand some processes involved in the genesis of authority. One of such processes was the formation of local identities expressed in the symbolic delineation of space by means of the construction of massive fortification systems.

[49] The first letter of periods, phases, strata and layers designate the approximate date of emergence.

The Gangetic city and the thought expressed in it: In the second chapter, following the ideas of R. G. Collingwood I proposed that as an object of anthropological an historical studies the phenomenon of the city is meaningless without "the thought expressed in it" (Collingwood 1946: 214). In the same chapter, based on the analysis of several Sanskrit and Pali texts I provided a definition that could potentially serve as "the thought expressed in" the phenomenon of the Gangetic city. The analysis of archaeological data undertaken in this chapter shows that the definition of the city extracted from Sanskrit and Pāli texts indeed can be a helpful and meaningful tool for conceptualizing the phenomenon of the Gangetic city; for its basic premise of defining the city as a combination of fortifications and authority adequately reflects the archaeology of Gangetic sites.

On most of the reviewed sites, the emergence of authority went hand in hand with the construction of fortifications. Ahicchatra, Atranjikhera, Kausambi, Mathura, Vaisali and Sravasti provide enough data for correlating the construction of fortifications with changes in material culture. The analysis of these data has shown that on all of these sites the construction of fortifications was roughly contemporaneous with all the other changes indicative of authority. Moreover, the archaeology of Kausambi has provided potential for correlating the structural history of fortifications directly with the structural history of the buildings that may have been used by authorities; the phases of the southwestern rampart and bastion can be correlated with the phases of the so-called palace, while the phases of the Ghoshitarama monastery can be correlated with the phases of the northeastern rampart.

The other fortified sites, in my view, are likely to follow the same pattern. In Bhita, evidence for fortifications and authority is present by the Mauryan period. Pataliputra provides very little archaeological data, yet from the literary sources we know that as the new capital of Magadha it was founded and fortified roughly around the same time in the fifth century BC. Rajgir also provides little archaeological data, yet the texts ascribe the construction of fortifications and the formation of authority (it was the first capital of Magadha) on this site to the sixth century BC. Finally Rajghat is a confusing case, yet the cause for this confusion is the lack of data and poor interpretations rather than the innate uniqueness of its archaeology.

Fortifications and authority thus define the city in the texts for good reasons: being contemporaneous and codependent, the construction of fortifications and the emergence of authority can be seen as an epitome of urban growth in the Ganges Civilization. Ahicchatra, Atranjikhera, Bhita, Kausambi, Mathura, Pataliputra, Rajgir, Vaisali, Sravasti and possibly Rajghat were cities. Hastinapura, Sonkh and Sonpur were mid-size villages. The contemporaries, i.e., the compilers of the cited Sanskrit and Pāli texts, conceptualized the urban nature of these sites in simple terms: through their grandiose fortifications and the explicit expressions of authority. I do not see the reason why we should not follow the same pattern in our own interpretations.

Chapter 4. The City in the Harappan Civilization

> We must turn more firmly to the Harappan civilization to view the origins of at least some major traits of Indian civilization. Probably the great gap between this ancient civilization and medieval India that we are prone to emphasize does not exist. If we direct our attention to these possibilities, we may be able to define far more of India's beginnings that has hitherto been possible.
>
> (Fairservis 1967: 44)

Introduction

In the previous chapter I analyzed archaeological data from thirteen Gangetic sites with the purpose of understanding whether the view of the city as a combination of fortifications and authority can be useful in the analysis of the archaeology of the Ganges Civilization. This chapter applies the same method to the archaeology of the Harappan Civilization. As in the previous chapter, fortifications are discussed under three themes: the date of initial construction, structural history and function. Authority is deduced through a combination of available archaeological traits such as settlement size, layout, architecture and material culture. The goal of this chapter is to place the construction of fortification in the context of the emergence of authority and to determine whether the view of the city extracted from the texts is useful for the analysis of archeological data from the Harappan Civilization and whether this view adequately reflects the

phenomenon of the Harappan city. As explained earlier, the sample of the sites that will be analyzed in this chapter includes Allahdino, Banawali, Chanhu-Daro, Dholavira, Harappa, Kalibangan, Kot-Diji, Lothal, Mohenjo-Daro, Nausharo, Surkotada, and Sutkagen-Dor[50].

Allahdino

Reports and references: Fairservis 1973, 1976, 1976-1977, 1977, 1982, Hoffman 1974a, b, Hoffman & Cleland 1977, Hoffman & Shaffer 1975, Shaffer 1974.

Introductory remarks: Allahdino (Nel Bazaar) is a very small site – around 100 meters in diameter (Hoffman & Shaffer 1975: 95) or approximately 40.000 square meters (Hoffman 1974b: 1) – located on the outskirts of modern Karachi (see figure 35). Discovered by Majumdar in 1934, it was excavated under the directorship of Walter Fairservis for two seasons in 1973-74. The total excavated area at Allahdino measured about 2800 square meters. Based on 4.5 meters deep sondage, excavated during the first season, Shaffer defined a sequence of six consecutive levels (Shaffer 1974: 141-147). During the second season, this sequence was modified into a cultural periodization consisting of three phases. Phase 3, the earliest, had no structures or features and was defined on lithics and pottery. Phase 2 was characterized by structures made of mud-brick, pise and wood. Phase 1, particularly its earlier levels, presented the main occupational period defined by mud-brick and stone architecture (Hoffman & Shaffer 1975: 96-99). No absolute dates were determined. Yet judging from pottery and other

[50] The sites are reviewed in alphabetical order.

objects of material culture, all occupational levels of the Allahdino sequence were assigned to the Mature Harappan period. Moreover, Hoffman and Shaffer (Hoffman & Shaffer 1975: 96) argued that the occupation throughout all cultural phases lasted between one to three hundred years. Fairservis believed that Allahdino was occupied for no longer than a hundred years (Fairservis 1982: 111).

Fortifications and authority: No perimeter walls, retaining walls or any other forms of fortifications were found at Allahdino (Fairservis 1982: 110, Hoffman 1974b). As far as authority is concerned, the archaeological record of Allahdino is more informative.

On one hand, the cultural history of Allahdino displays a remarkable continuity. All stratigraphic units are characterized by a set of distinctive Mature Harappan traits and are consequently classified as belonging to the Mature Harappan culture (Shaffer 1974: 149). On the other hand, at least two important transitions characterize the cultural sequence of Allahdino. Transition from Phase 3 (level V) to Phase 2 (level IV) witnesses the abrupt introduction of structures made of mud-brick, pise and wood (Shaffer 1974: 19-27, 143-144). The earlier levels (VI-V), although defined as Mature Harappan, have neither structures nor features. Phase 2 (level IV), on the other hand, is characterized by the fully developed mud-brick architecture, which according to Shaffer (Shaffer 1974: 150) demonstrates "a rather sophisticated knowledge of construction techniques." Based on parallel changes in lithics, architecture and ceramics, Shaffer (Shaffer 1974: 153) argues that this transition reflects a shift from pastoral nomadism represented by Levels VI-V to sedentary agriculturalism represented by Levels IV-I.

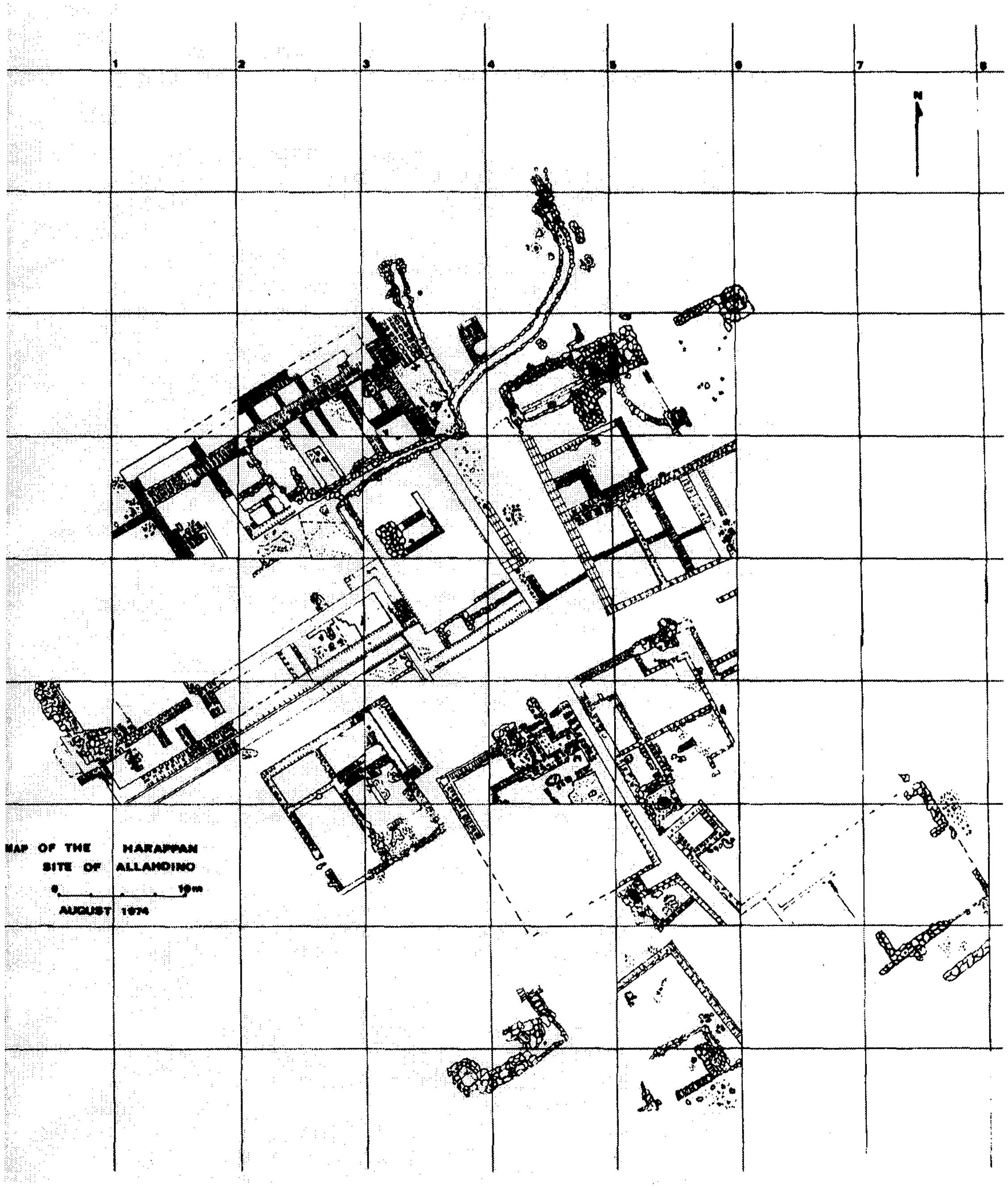


Figure 35: Allahdino (after Hoffman and Shaffer 1975)

The second transition takes place between Phase 2 (Level III) and Phase 1 (Level II). That Shaffer (1974) in his original report on cultural stratigraphy of Allahdino does not view this transition as an important cultural change seems to me erroneous. Phase 1 (Level II) marks a significant intensification of structural activities. In fact, the overwhelming majority of architectural remains unearthed in Allahdino are stratigraphically associated with Level II. The most important structures of this level include a household water system, a small-scale irrigation network and several public structures of enigmatic function (Hoffman 1974b). The houses according to Hoffman (1974b: 26) were laid out according to the Northwest-Southeast axis. In addition, public structures were grouped in one part of the site (see figure 35).

In summary, if Shaffer's hypothesis is right, the first transition led to the establishment of an agricultural hamlet, consisting just of three or four mud-brick houses. The second transition led to the formation of a fully developed agricultural village with an irrigation channel, a household water system and some public buildings (Hoffman 1974b).

The role of authority, if any, in the first transition must have been minimal. A shift from pastoral nomadism to agricultural sedentism does not require rigid social differentiation and authoritative decisions. The second transition however indicates a more complex picture. Phase 1(Level 2) reveals a whole set of artifacts and architectural features that typically characterize large-scale Harappan settlements. Judging from the results of the excavation, however, none of the artifacts were locally produced. As Shaffer (1982: 45) justly noted, this implies a very developed internal trade and distribution network. In my view, it also has implications for the understanding of the

role and origins of authority on the site. Interestingly enough, among other artifacts, Phase 1 (Level 2) reveals several seals, sealings and inscribed objects. According to Fairservis, this indicates that Allahdino had a social system and mechanisms of leadership familiar on a larger scale at other Harappan sites (Fairservis 1982: 111). Fairservis' argument is well taken, for the least that Harappan seals and sealings must indicate is a social system of which the Indus script was representative as well as the presence of individuals who were familiar with the script. In other words, artifacts and features associated with the deposits of Phase 1 (Level 2), indicate that by the beginning of this phase, Allahdino was fully acculturated in the world of the Harappan Civilization. If authority played any role in this acculturation, it must have been introduced to Allahdino from outside, from already existing Mature Harappan settlements; for as a sedentary community Allahdino emerged long after the formations of the Mature Harappan Culture.

To conclude, it is likely that Allahdino was a small center of local administration that was fully incorporated within the larger network of the Harappan sociopolitical order and like most artifacts and features discovered in Allahdino had external origins.

Banawali

Reports and references: IAR 1983-84: 24-29; 1986-87: 32-34; 87-88: 21-27; Bisht 1976, 1977, 1978, 1982, 1984, 1987, 1997, 1998-99, Bisht & Asthana 1979.

Introductory remarks: Banawali is located on the banks of the lost Hakra River in the district Hissar in Haryana (see figure 36). It occupies a relatively small mound measuring approximately 400:400 m (Bisht 1978). In 1974-1977, R.S. Bisht conducted

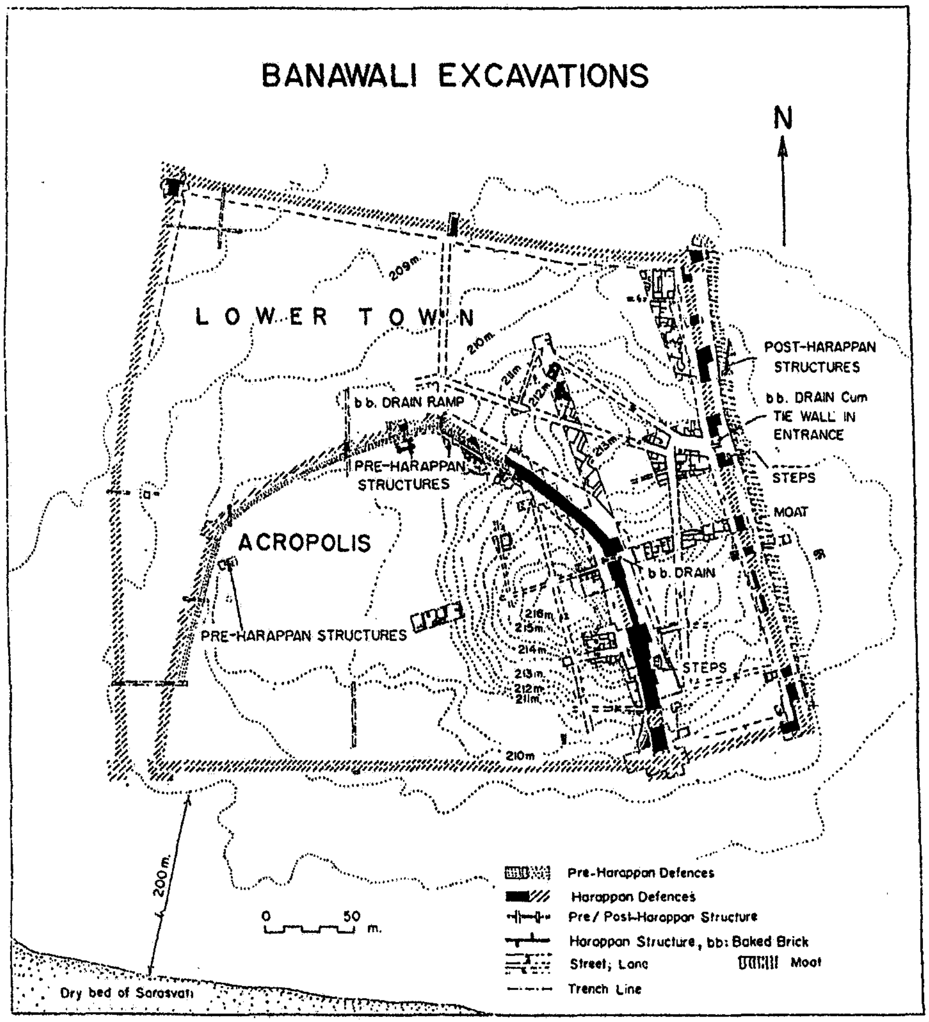


Figure 36: The Map of Banawali (after IAR 1987-1988)

the first three seasons of excavations at Banawali on behalf of the Department of Archaeology and Museums of Haryana. In 1983, Bisht resumed the work at Banawali, this time on behalf of the Archaeological Survey of India. Between 1983 and 1988, he

conducted three more excavation seasons at this site. Unfortunately, no comprehensive report of these excavations has yet been published.

The cultural sequence as defined by Bisht for Banawali begins with the pre-Harappan local phase similar to that of Sothi or Kalibangan I, then transforms into the Urban Harappan phase and ends with the post-Harappan cultural entity reminiscent to that of the Bara Culture (Y. D. Sharma 1973). The following is the most recent version of Banawali periodization (IAR 1987-88: 23):

Period I: Pre-Harappan (Kalibangan) Culture

IA: Pre-defense phase

IB: Defense phase

IC: Transitional (Proto-Harappan) phase

Period II: Mature Harappan Culture

Period III: Post-Harappan (Banawali-Bara) Culture

As far as the dates are concerned, there are at least two publications offering precise chronological brackets for each of the three periods (Bisht 1976, Ghosh 1989: II.45-46). It is not clear on what kind of argument these publications are based since the existing C14 dates are scarce and contradictory. Period I for example does not have any absolute dates. Based on pottery, Bisht equates it with Siswal B and Mitathal I, as well as draws broader parallels with the pre-Harappan levels at Kot-Diji and Amri (Bisht 1987: 145). Period II has a few radiocarbon dates, yet some of these dates are clearly erroneous. Based on those dates that are more reasonable, this period should be placed approximately between 2500 BC and 1800/1750 BC (Bisht 1997: 257). Period III has no radiocarbon dates, yet based on similarities in pottery Bisht equates it with Sanghol IB,

Mitathal IIB, Bhagwanpura IA and Dadheri IA (Bisht 1997: 260). In sum, the absolute chronology of Banawali remains tentative.

Fortifications: Banawali, although being a relatively small site, has an elaborate and impressive system of fortifications (see figure 31). Besides being surrounded and divided by mud-brick walls, Banawali has a moat and a channel on the eastern side, several bastions and gates, a ring road running on the outer side of the perimeter walls, an internal system of roads related to fortifications and gates, and at least one platform.

According to the data presented by Bisht, the construction of fortifications at Banawali began during Period IB and continued throughout Period IC and Period II when the settlement entered the Mature Harappan Phase. Built and modified gradually during several hundred years, the fortifications underwent many structural modifications. The initial perimeter wall was only 1.4 m wide. Towards the end of Period IB, however, this wall was strengthened and widened to ca 2.5-3.2 meters (IAR 1987-88: 23; (Bisht 1998-99: 18). In Period IC, the wall was further widened, the whole fortification system was noticeably renovated, and the division into the two distinct sections was established (Bisht 1998-99: 15-16). In Period II, a gate complex, a V-shaped moat, a berm and a channel parallel to the moat were constructed on the eastern side of the settlement (Bisht 1998-99: 18). Around the same time, a platform was built under the Acropolis (IAR 1987-88: 25). Interpreting these data, one must remember that the length of the moat, the berm, and the perimeter wall has been conjectured rather than precisely determined. For example, the moat was traced only for 75 meters along the eastern side (IAR 1983-84: 27) and was not traced at all on any other side of the settlement. Also, since there are no precise dates for Period I, it is unclear what were the actual chronological gaps between

the initial construction of the perimeter wall, the division of the settlement into two distinct sections and the reconstruction of fortifications. Nonetheless, the existing data provide sufficient information for making preliminary conclusions with regards to at least two aspects of the fortification system at Banawali: its structural history and function.

As far as the structural history is concerned, the construction of fortifications at Banawali was quite gradual. For example, when during Period IC almost the entire settlement was erased and built *de novo*, the structure and design of the previous fortifications was used in the construction of the new fortifications (Bisht 1998-99: 16). The two structural modifications were nonetheless very significant and likely to reflect important sociopolitical changes. The first one was the creation of a fortified settlement with the two distinct sections divided by a mud-brick wall. The second one was the construction of a moat, berm and a gate complex on the eastern side of the settlement.

As far as the function is concerned, it seems that at least until the Mature Harappan period, fortifications at Banawali performed a symbolic role. The following set of traits supports this observation. First, the wall was too thin to carry a military function. Second, the first significant structural modification resulted in the segregation of space that must have had direct sociopolitical or religious implications. Third, only one platform was so far detected. Given the locations and size of this platform, it is unlikely that it was built as a measure against floods. More likely, similar to the platforms of Mohenjo-Daro and other Harappan sites, this platform elevated an important structure and by doing so carried a political or religious function (IAR 1987-88: 25). Fourth, there were structures outside the fortifications wall (Bisht 1998-99: 15-16). In fact, the earliest wall was built right on top of the structures constructed during Period IA (Bisht 1987:

142). Hence, even at the earliest stages, the wall did not mark the actual boundary of the settlement. Fifth, the shape of the pre-Harappan wall was smoothly incorporated in the natural landscape. According to the excavators, it was "designed like a large oval following the existing natural elevation" (IAR 1987-88: 23).

In sum, most of these traits indicate that until the construction of the gate and the moat on the eastern side of the settlement, fortification walls at Banawali did not play an important role in the protection of the settlement from military threat or floods. Instead, they marked the boundary of some symbolic significance.

Authority: The first drastic transition that is indicative of the emergence of authority in the cultural history of Banawali takes place during Phase IC (Bisht 1998-99: 16). Bisht equates this phase with Siswal B and Mitathal I as well as with the pre-Harappan levels at Kot-Diji and Amri. Given the nature of changes that take place during this phase, it would make sense to distinguish it as a separate cultural period. In fact, Bisht recognizes this at some point, yet continues to classify this phase as part of the pre-Harappan cultural complex (Bisht 1987: 145). The innovations that characterize this phase are quite drastic (Bisht 1998-99: 16-17). The new traits of material culture include bricks of the ratio 4:2:1, triangular terracotta cakes, 8-shaped terracotta nodules, chert blades and a substantial increase in beads and bangles. The pottery represents a mix of local and new Harappan shapes and designs. Most importantly, however, the whole settlement is rebuilt anew and the division into the lower and upper sections is established. Architecture becomes more sophisticated and significantly differentiated in size and quality (Bisht 1984). A new street system is laid out and the houses are oriented according to the cardinal directions. Interestingly, in his early publications, Bisht does not

pay much attention to Phase IC. The main shift in sociopolitical complexity according to him takes place in Period II (Bisht 1976, 1977, 1978, 1982). Recently, however, Bisht has begun to emphasize the significance of Phase IC as a transitional 'proto-Harappan' period (Bisht 1987: 143-145, 1998-99: 16-17). In my view, judging even from the scarce data that are currently available in print, it is clear that the innovations of Phase IC could not have occurred without the presence of a strong authority on the site. The rebuilding of the settlement, the reinforcement of fortifications and the creation of the two distinct sections alone constitute sufficient evidence for authority in Banawali. Hopefully, the publication of the previously excavated data as well as further research will add more information in regards to the innovations and cultural changes during Phase IC.

Chanhu-Daro

Reports and references: F. R Allchin 1985, Brown 1938, Ghosh 1937, Mackay 1935-36, 1936a, b, 1937a, b, 1943, Majumdar 1934, Newberry 1983a, Piggott 1946, Shar & Vidale 1985, Yule 1988.

Introductory remarks: Chanhu-Daro is located next to the village of Jamal Kirio in the Nawabshah District of Sind, Pakistan (see figure 37). The Indus River once flowed next to the site. Now, Chanhu-Daro is about 12 miles away from its left bank. The site was discovered and briefly explored by Majumdar in 1931. In 1935-1936, it was excavated by Mackay under the auspices of the American School of Indic and Iranian Studies and the Boston Museum of Fine Arts. The history of this important project is

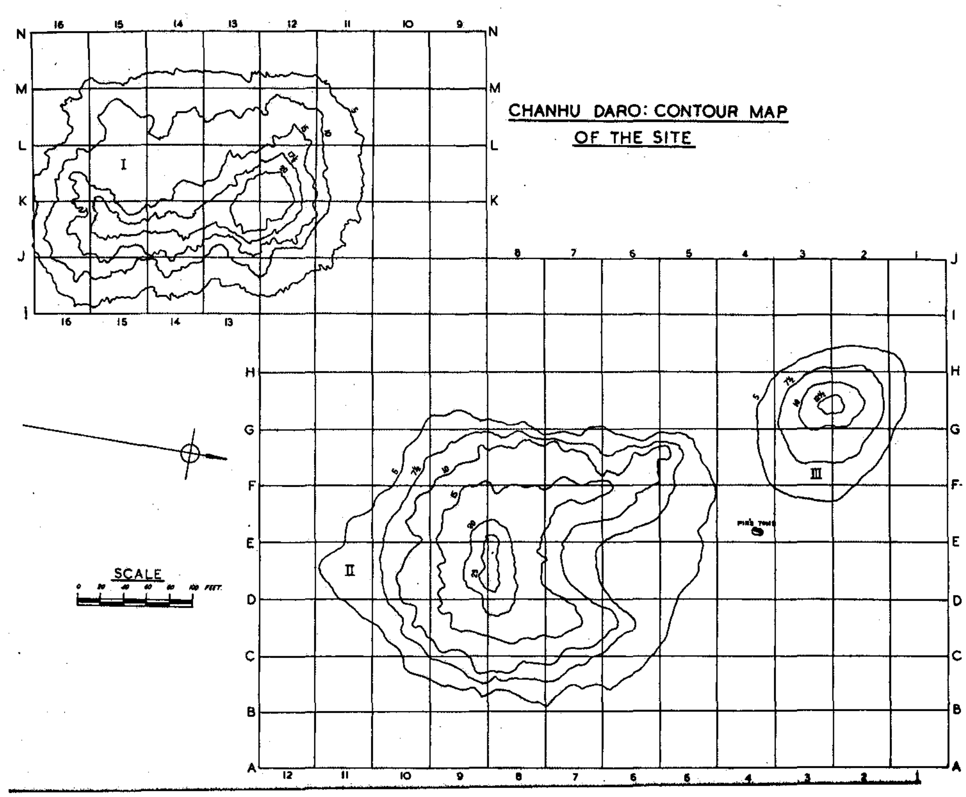


Figure 37: Contour Map of Chanhu-Daro (after Mackay 1943)

described in detail by Possehl (Possehl 1999: 95-101). Although Chanhu-Daro is an extensively excavated site; its cultural history, settlement layout and the dynamics of expansion are poorly known. The methods that Mackay employed in his excavations were quite rudimentary.

At the time of excavations, the site consisted of three mounds. Both Majumdar and Mackay however thought that initially the site had occupied only one mound and was later divided into three parts by floods and erosions: for numerous traces of occupation were detected between the mounds (Mackay 1943: 59). Considering the gaps between the

Table 7: Chronologies of Chanhu-Daro

Mackay	*Piggot*	*Possehl*
Harappan Period	Chanhu Daro I Period	Mature Harappan Period
Harappa III	Chanhu-Daro IA	Mature Harappan A
Harappa II	Chanhu-Daro IB	Mature Harappan B
Harappa I	Chanhu-Daro IC	Mature Harappan C
Jhukar Period	Chanhu-Daro II Period	Mature Harappan D
Jhangar Period	Chanhu-Daro III Period	Jhukar Period, Post-Urban Harappan
Trihni Period		Trihni Period
Islamic Period		Jhangar Period

mounds and the mounds themselves, the site must have occupied at least 5 hectares (see figure 37).

To date, there are three versions of the cultural sequence of Chanhu-Daro (see table 7): the original one defined by Mackay (Mackay 1943), the one revised by Piggot (Piggott 1943: 179), and the one revised by Possehl (Possehl 2002c: 74). Mackay distinguished five occupational periods: Harappan, Jhukar, Jhangar, Trihni, and Islamic. Piggot generally followed this sequence, yet renamed the periods. Possehl, in one of his recent publications, proposed yet another sequence: the Harappan Period in his view should be split into four rather than three sub-periods and the Trihni ware period precedes rather than follows Jhangar. It is unclear what the grounds are for this periodization. Henceforth, I shall be referring to Mackay's original terminology. It is important to note

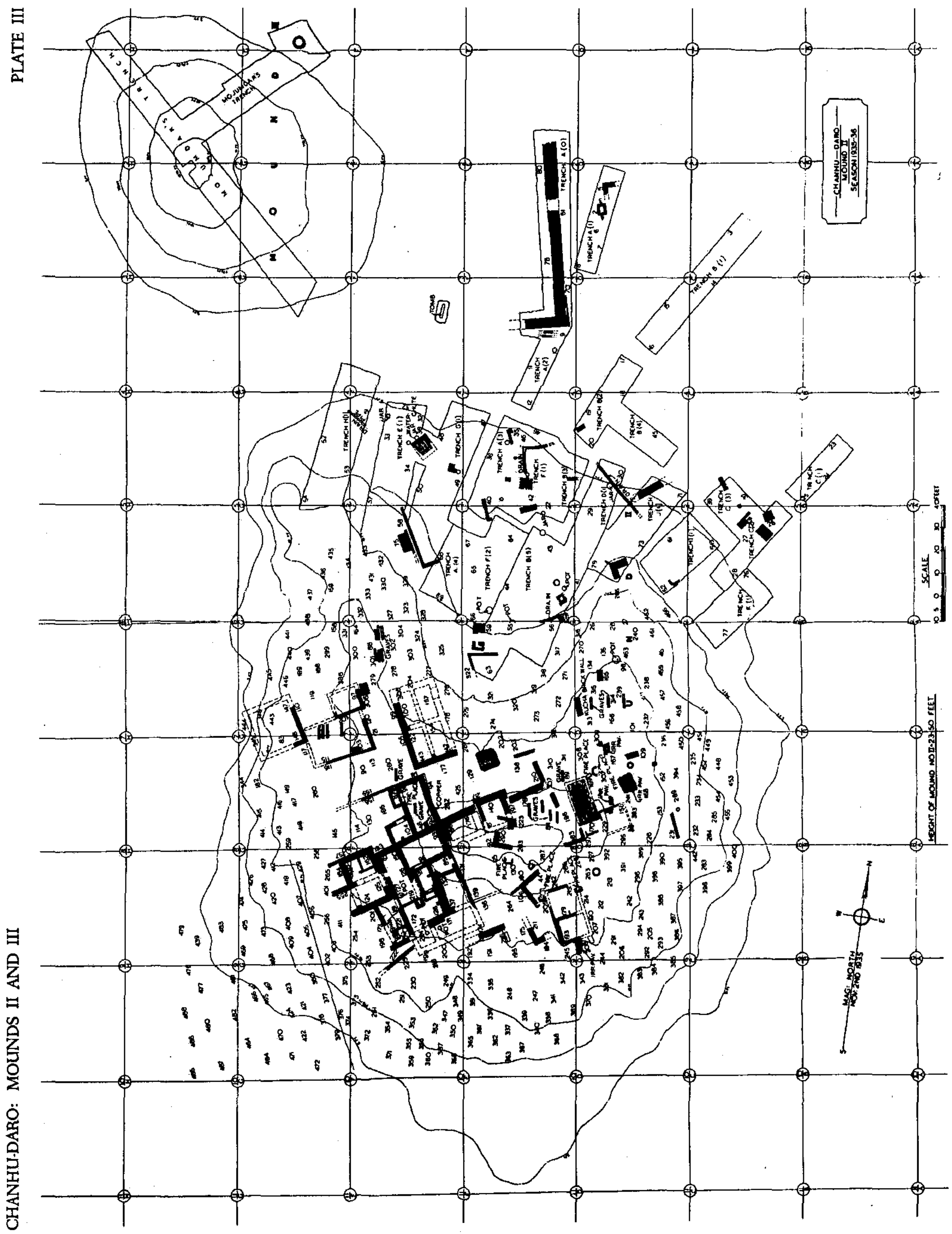


Figure 38: Chanhu-Daro, Mounds II and III

that all the major occupational periods including the Harappan sub-periods are structurally unrelated to one another. Mackay saw this discontinuity as the result of population movements (Mackay 1943: 34, 37).

Fortifications: There is still no consensus on whether Chanhu-Daro or any section of it was fortified. I however believe that the currently available data provide sufficient evidence for the existence of a fortification system that consisted of at least one perimeter wall and several mud-brick platforms (see figure 38). The very first trench excavated by Mackay in Chanhu-Daro revealed the remains of a massive wall, which was characterized by several interesting features (Mackay 1943: 1-2):

1. It was significantly larger than any other wall unearthed in Chanhu-Daro. Its length was traced for 80 feet. Its width varied from 4 feet 9 inches to 5 feet 4 inches.

2. Its ends were never reached. According to Mackay, the tracing of this wall was stopped due to the presence of crops on one end and the tomb of a local saint on the other end.

3. It stood at the foot of Mound 2, the main occupational area. Judging from the location of other occupational areas, it was positioned on the edge of the settlement.

4. It was revetted on the eastern side. The length of the revetment was traced for 22 feet. The width of the revetment varied from 6 to 3 inches.

5. The structural remains discovered in the direct association with the wall were sporadic and fragmentary. No rooms were detected.

Considering these traits, one may conclude with a high degree of certainty that this structure was not part of any building, but a freestanding wall that encircled either the entire site or a significant section of it. Judging from the alignment of this structure and

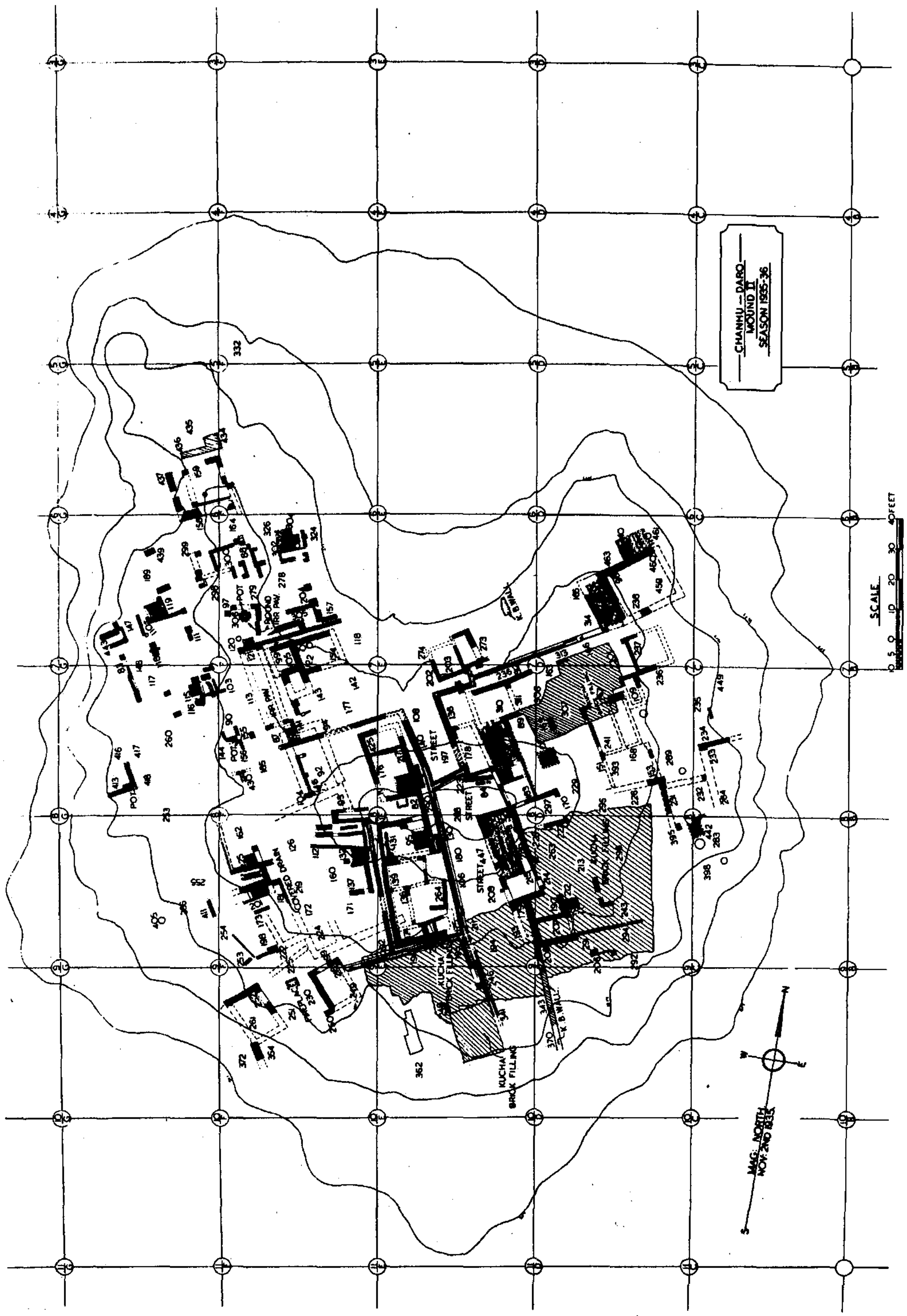


Figure 39: Chanhu-Daro, Mound II, Harappa II Level (after Mackay 1943)

scarce stratigraphic notes recorded by Mackay, it was built in Period 'Harappa II', the time of cultural efflorescence and active structural activity on the site. In association with this period, Mackay also reports the construction of massive mud-brick platforms. In particular, he notes that in several trenches on Mound 2 he hit "the upper portions of solid platforms of unburnt brick". Moreover, in the deep trench he claims to have reached the base level of one of these platforms (Mackay 1943: 37). Mackay seems to believe that these platforms were originally built underneath the entire site. Later some of them were eroded due to frequent floods. Given the state of the data, it is difficult to verify these conclusions. It is clear that by the second Harappan sub-period, a significant part of Mound 2 had rested on several massive mud-brick platforms. Interestingly the structures that stood on top of these platforms were very modest (Mackay 1943: 40).

To conclude, both the wall and mud-brick platforms appear to have been built during the second Harappan sub-period. Due to the paucity of data, their function remains enigmatic.

Authority: Since the culture history of Chanhu-Daro is poorly defined, it is difficult to place the emergence of authority on this site in a chronological context. It is clear that authority was present at Chanhu-Daro by the second Harappan sub-period. Judging from the architecture, seals, the discovery of a bead factory and other traits of material culture, Harappa II was the period of construction and overall cultural efflorescence (see figure 39). The dimensions of the platforms associated with this period indicate a massive consumption of labor, social complexity and authority. It is also clear that the formative period, if any, was short: for so far no Early Harappan occupations

have been detected[51]. Given this it is likely that Chanhu-Daro presents an example of Harappan expansionism, when social complexity and authority were exported from outside and planted on virgin soil. Of course, further excavations and the discovery of earlier occupational levels could alter this picture.

Dholavira

Reports and references: IAR 1984-85: 14, 17; 1987-88: 15-16; 1989-90: 15-20; 1990-1991: 10-12, 16; 1991-92: 26-35; 1992-93: 27-31; Bisht 1989a, b, 1991, 1998-99, 1999, Patel 1997, Possehl 1992.

Introductory remarks: Dholavira is located on Kadir Island off the Great Rann of Kutch in the district Kutch of Gujarat, India (see figure 40). Discovered in 1967, it has been continuously excavated since 1989 under the directorship of R.S. Bisht on behalf of the ASI. The exact size of the site is still unclear. R.S. Bisht believes that in its heyday, the site covered over 100 hectares (Bisht 1998-99: 21): for the fortified area alone measures at 800 by 650 m, or 52 hectares.

The cultural sequence of Dholavira as defined by Bisht begins ca 2650 BC and consists of seven stages (Bisht 1999: 403); IAR 1991-92: 26-31). Combined with the periodization and dates proposed by Possehl (Possehl 2002c: 67), this sequence can be summarized from bottom to top as follows.

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[51] One must note however that the deep trench laid by Mackay on Mound 2 did not reach virgin soil: water prevented further excavations.

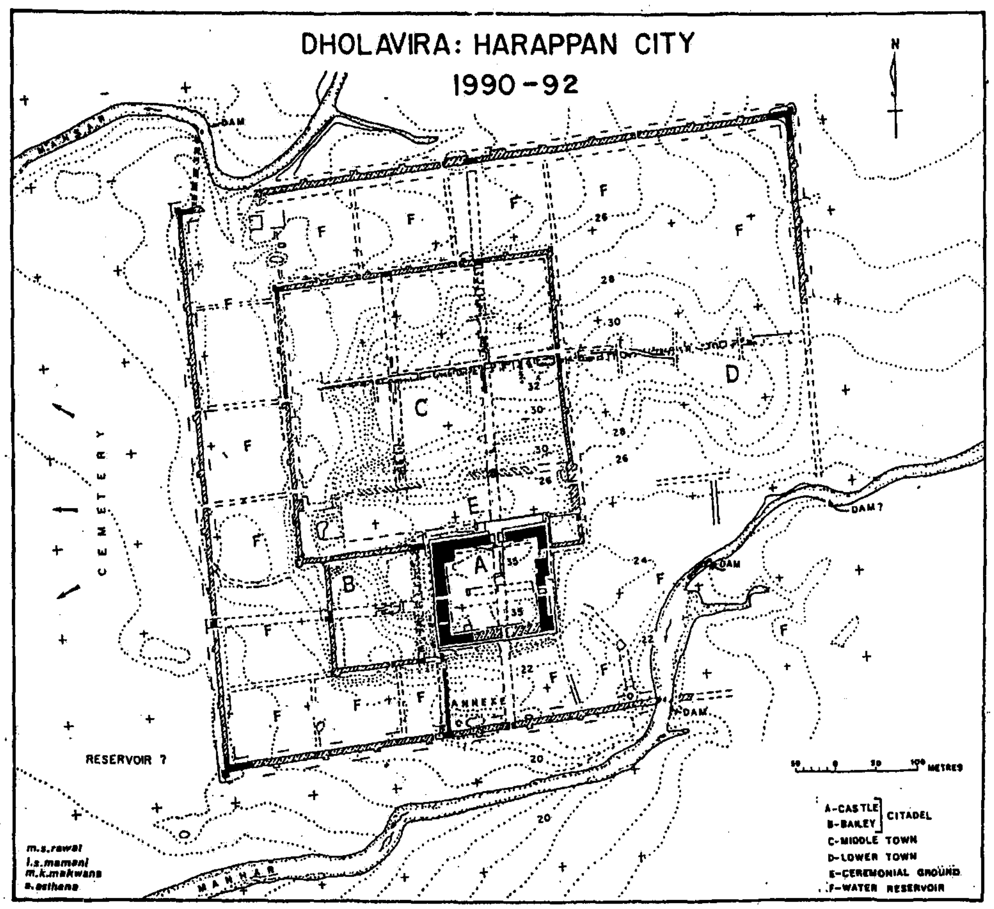


Figure 40: Dholavira (after IAR 1991-92)

Stage I	2650-2500 BC	Early-Mature Harappan TransitionA
Stage II	2550-2500 BC	Early-Mature Harappan Transition B
Stage III	2500-2200 BC	Mature Harappan A
Stage IV	2200-2000 BC	Mature Harappan B
Stage V	2000-1900 BC	Mature Harappan C
Stage VI	1850-1750 BC	Post-Urban A
Stage VII	1650-1450 BC	Post-Urban B

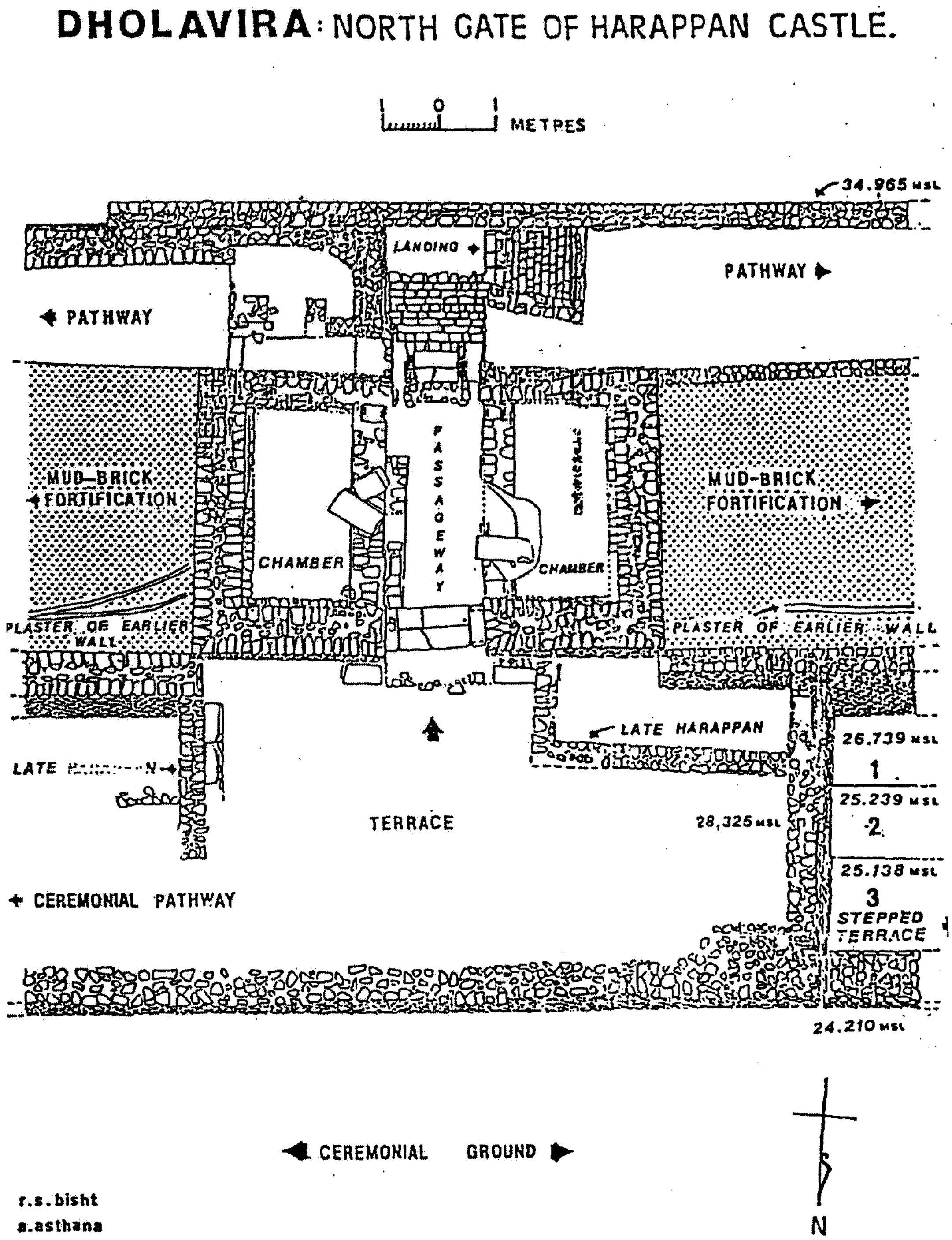


Figure 41: Dholavira, North Gate of the Castle (after IAR 1991-92)

Judging from the size of the site, the magnitude of its fortifications and the splendor of its material culture, Dholavira is certainly one of the most fascinating Harappan sites. Unfortunately, despite the ongoing excavation, very little data is available in print.

Fortifications: The system of fortifications is one of the most striking and characteristic features of Dholavira (see figures 40-43). Judging from the available data, it evolved gradually from the local pre-Harappan traditions (see figure 42). Three pre-defense layers (10-7) were detected during the excavations. None of these layers had Harappan material. Layers associated with the earliest perimeter wall (6-5) were non-Harappan as well (Bisht 1991: 76). Nonetheless, Bisht lumped pre-defense and defense layers in the same cultural period. The first perimeter wall according to Bisht was built during Stage I, soon after the founding of the site. During the next two stages, the fortifications underwent drastic modifications and by stage III, i.e. the beginning of the Mature Harappan Period, transformed into a complex network of walls, gates, passages, bastions, and encircling roads.

The immensity and complexity of the Dholavira fortification system during the Mature Harappan Period is so amazing that many of its structural features have no parallels on other Harappan sites. Bisht has provided several informative descriptions of the structural history and the layout of this fortification system. Based on these data, I have highlighted five points, which, in my view are the most characteristic of this unique architectural complex.

1. From the time of its initial construction during Stage I, fortifications at Dholavira were truly *grandiose*. For example, the earliest perimeter wall reached 11.1

meters in width and 4 meters in height (IAR 1991-1992: 26). The castle, i.e. the most heavily fortified part of the settlement built by stage IIIA, was surrounded by double ramparts with stone walls and stood to a height of 16 meters (IAR 1984-1985: 14)! Some of the fourteen city gates – particularly those surrounding the castle – were immensely high and wide, yet had narrow passages (Bisht 1998-99: 30).

2. Many architectural elements incorporated within the fortification system at Dholavira had conspicuous *non-utilitarian or non-military significance*. The following two examples illustrate this point:

a) Of the two stadia detected between the citadel and the middle town, the smaller one was surrounded by massive walls on three sides, whereas the larger one did not have any circumvallation (Bisht 1999: 404);

b) The east gate of the castle had symmetrically arranged, neatly cut and highly polished limestone blocks and pillar bases incorporated in the design of its internal elevated chamber. Bisht proposed that the arrangement of blocks and pillar bases was esthetic rather than utilitarian (Bisht 1998-99: 79). Other gates of the castle display similar structural elements.

3. During its heyday, Dholavira was a *highly segregated place*. The three main sections were the citadel, the middle town and the lower town. The citadel in turn was divided in two sections termed by Bisht 'the castle' and 'the bailey'. North of the citadel, there was a walled passage. South of the citadel, there was a partly walled section. Finally, on the eastern side of the lower town there were a number of water reservoirs, all protected by massive walls with bastions and towers.

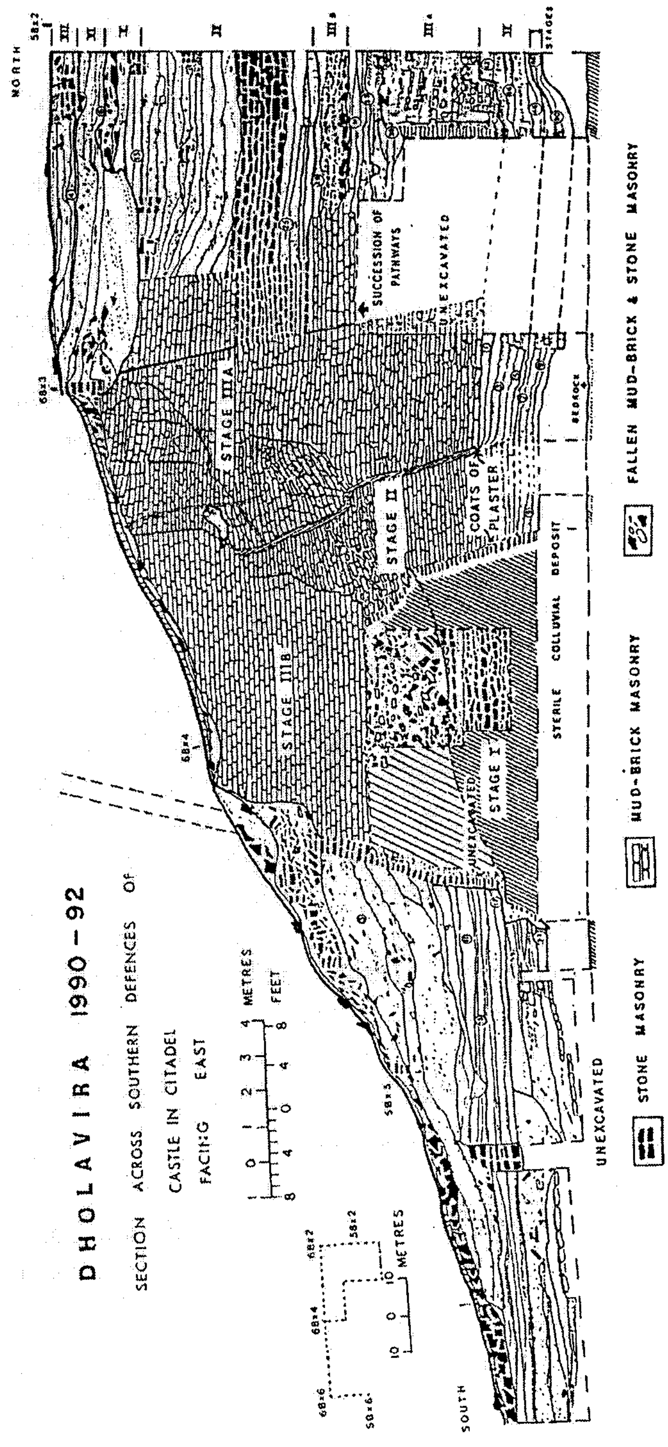


Figure 42: Section across Southern Defenses of the Castle (after IAR 1991-92)

4. One of the most interesting features of Dholavira layout is the presence of *empty spaces and open areas* encircled and accentuated by walls (see figures 40, 41, 43). Some of these spaces and areas reach 140 meters in width (Bisht 1998-99: 72). The most obvious empty space is located between the northern side of the citadel and the southern side of the middle town (IAR 1991-92: 31). Connecting the grandiose North Gate of the Castle with the main stadium of the Middle Town, it clearly had a strategic position (see figure 41). Bisht proposed that it performed a ceremonial function and served as the main entrance to the Castle.

5. Another unique feature of the urban landscape of Dholavira is the large number of free-standing walls (see figure 40). Besides dividing the city into sectors, walls partially or fully surround one of the stadia, the southern annex of the castle, water reservoirs, empty spaces and some residential units.

In terms of functionality, each of these traits is indicative of sociopolitical structures and deeper ideational meanings (see table 8). For example, the grandiose scale of architectural elements is too overwhelming to be explained away by the military demands of the ruling elite. The conspicuous consumption of labor necessary for the construction of massive ramparts, walls, gates and bastions is certainly indicative of the desire to express power and authority by means of architecture. The presence of non-military and non-utilitarian elements shows that ritual, symbolic and esthetic considerations were an integral part of the fortifications' function. The intricate urban segregation augmented by empty spaces and open areas points to the great role that social considerations played in the construction of Dholavira fortification system. Finally, the large number of free-standing walls makes one wonder whether some kind of symbolism

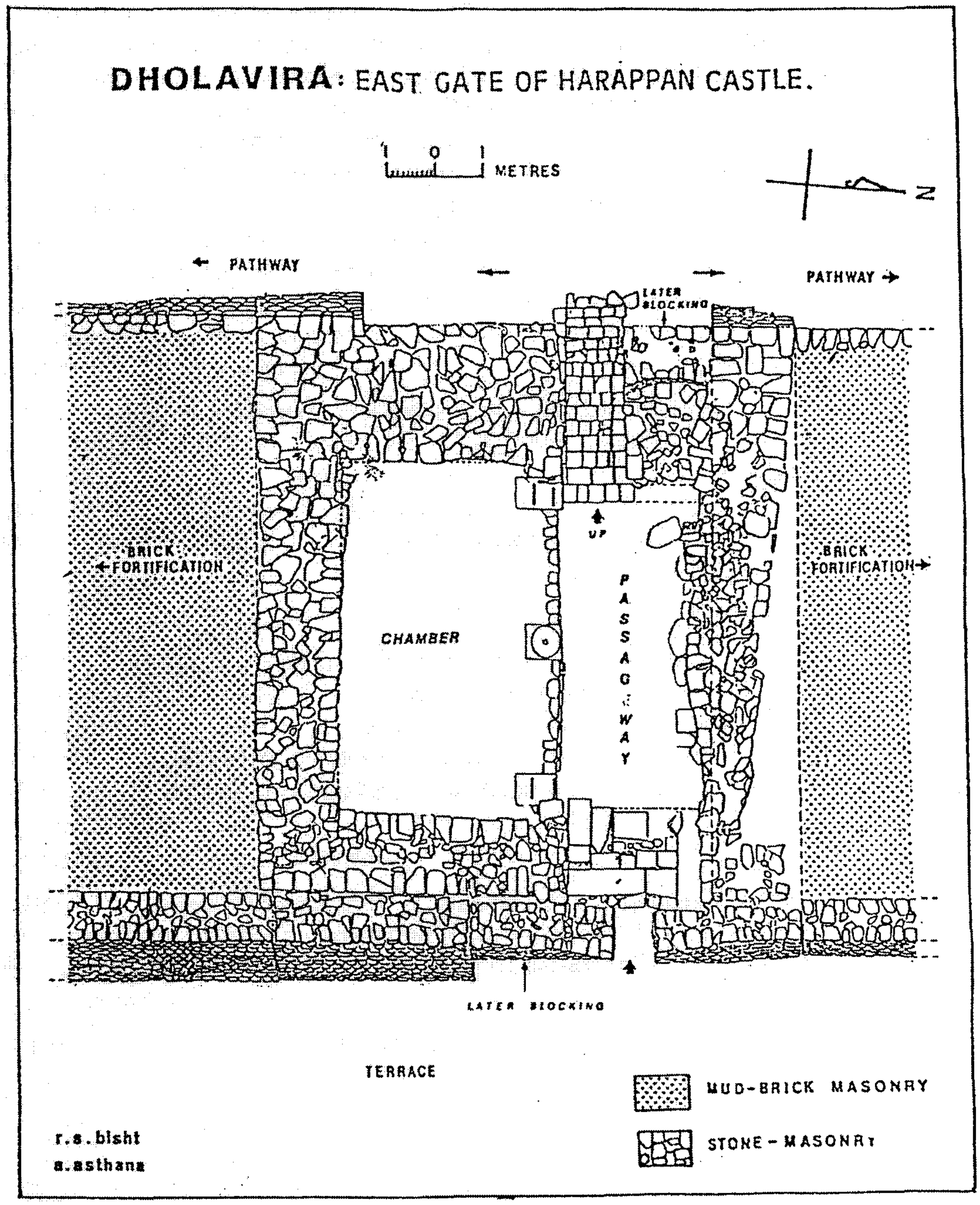


Figure 43: Dholavira, East Gate of the Castle (after IAR 1991-92)

Table 8: Traits of Dholavira Fortifications and their Possible Meanings

Traits	*Interpretative Options*
Grandiose scale	Military defense Expression of power and authority
Non-utilitarian elements	Ritual or symbolic functionality Expression of esthetic values
Urban segregation	Maintenance of social hierarchy Maintenance of social heterarchy Maintenance of ritual purity
Empty spaces and open areas	Ritual and religious ceremonialism Performance of sociopolitical functions
Free-standing internal walls	Social segregation Defense Symbolism of space and border

of space and border played a role in the creation of Dholavira's urban landscape. Like the idea of water was a key element in the ideology of Mohenjo-Daro (wasserluxus), the division of space by walls must have played an important role in the worldview of Dholavirites.

To conclude, *the segregation, accentuation and symbolization of space played an important role in the shaping of meanings of the fortification system at Dholavira.* This of course does not mean that military considerations were insignificant. The latter by no

means excludes the former. It is my conviction however that by the Mature Harappan period, *the ideational factors of social, political and possibly ritual nature overpowered any other meanings.*

Authority: There is no need to argue that Dholavira was an important seat of authority during the Mature Harappan period. The size, layout, architecture, writing and material culture unequivocally present it as a great center of power. The chronological frame for the emergence of authority however could be the point of debate. On the one hand, it is obvious that stage IIIA, the beginning of the Mature Harappan period, marked the most drastic transition in the history of Dholavira. On the other hand, stages I and II foreordained the efflorescence of stage III, and although the data on these early stages are currently scarce, one can cite at least three lines of evidence in support of the growth of authority during these stages (IAR 1991-92: 26-28):

1. The structural history of fortifications shows that *monumentality* had been attained long before stage III: as mentioned above the earliest wall was 11 meters in width and 4 meters in extant height! In a similar way, demand for the strengthening of the wall had emerged long before stage III: the wall was widened for 2.8 meters in the beginning of stage II. Thus both the initial construction and the further structural modification of the perimeter wall required a high expenditure of labor and implied, in my view, the existence of a strong authority.

2. Several "definitive principles of planning and architecture" evolve prior to stage III (IAR 1991-92: 28). For example, beginning from stage I, bricks of the typical Indus proportion 4:2:1 are used both in fortifications and domestic structures. During stage II, white and pink plasters are applied to fortifications and domestic architecture all

over the site. The latter phenomenon is quite indicative, for the applications of plasters was truly extensive – 13 coats on the inner side of the defensive wall and numerous coats on the floor and wall of various structures (Bisht 1999: 403). Given the frequency, wide spread, standardization and esthetic elements of these colorful plasters, it is not unreasonable to see the hand of authority both behind their use in stage II and the abrupt termination of use by stage IV.

3. The first noticeable expansion of the site takes place in the beginning of stage II. The expansion itself is not as significant as one of its consequences, i.e. the beginnings of spatial segregation that in turn is indicative of the ongoing social stratification and the shaping of authoritative structures.

To conclude, authority at Dholavira appear to have evolved gradually and locally during the first two cultural periods and by stage III entered the period of prosperity. In this respect its genesis went hand in hand with the construction of fortifications.

Harappa

Reports and references: Clark 2003, Dales 1989, 1992b, Dales & Kenoyer 1986b, 1987, 1989, 1990a, b, 1991, 1992a, b, Kenoyer 1991b, 1992, 1993, 1994a, Kenoyer & Meadow 1997, 2001, Meadow 1991, Meadow & Kenoyer 1993, 1994, 1997, 2000, 2001, in press-a, b, Meadow et al 1994, 1995, 1996, 1997, 1998, 1999, 2001, Meyer 2003, Heather M.-L. Miller 1994, 1999, Sahni 1916-1917, 1920-1922, 1923-24, 1924-25, Srivastava 1936-1937, Vats 1926-1927, 1927-1928, 1928-1929, 1929-1930, 1930-1934, 1940, Wheeler 1947, 1962.

Introductory remarks: Harappa is located in the district Sahiwal of Pakistani Punjab. This is the most excavated site of the Indus civilization. There are several good reviews of the explorations and excavations undertaken at this site (Kenoyer 1991b: 32-38, Possehl 1991, 1999). The most important archaeological projects include excavations by Sahni, Vats, Wheeler, Mughal and since 1986 by a joint American-Pakistani archaeological expedition (HARP). The first relative periodization of Harappa was defined by Vats. Following Marshall's periodization of Mohenjo-Daro, Vats distinguished three periods: the early, the intermediate, and the late; (Vats I. 8-9) and traced each of these periods in five areas of the site. The most recent sequence was originally defined by G. Dales and later modified by Meadow and Kenoyer. The updated version of this sequence consists of five periods (Meadow et al 2001: 3):

Period 1	Ravi (Aspect of the Hakra) Phase	ca. 3300 – 2800 BC
Period 2	Kot Diji (Early Harappa) Phase	ca. 2800 – 2600 BC
Period 3A	Harappa Phase A	ca. 2600 – 2450 BC
Period 3B	Harappa Phase B	ca. 2450 – 2200 BC
Period 3C	Harappa Phase C	ca. 2200 – 1900 BC
Period 4	Harappa / Late Harappa Transitional	ca. 1900 – 1800 BC
Period 5	Late Harappa Phase	ca. 1800 – 1300 BC

Besides serving as chronological markers, each period is well defined in terms of various cultural and technological characteristics. The date for the beginning of the earliest occupation at Harappa remains an open question, for it is possible that the earliest levels are still hidden under the deposits of Mound AB or Mound E.

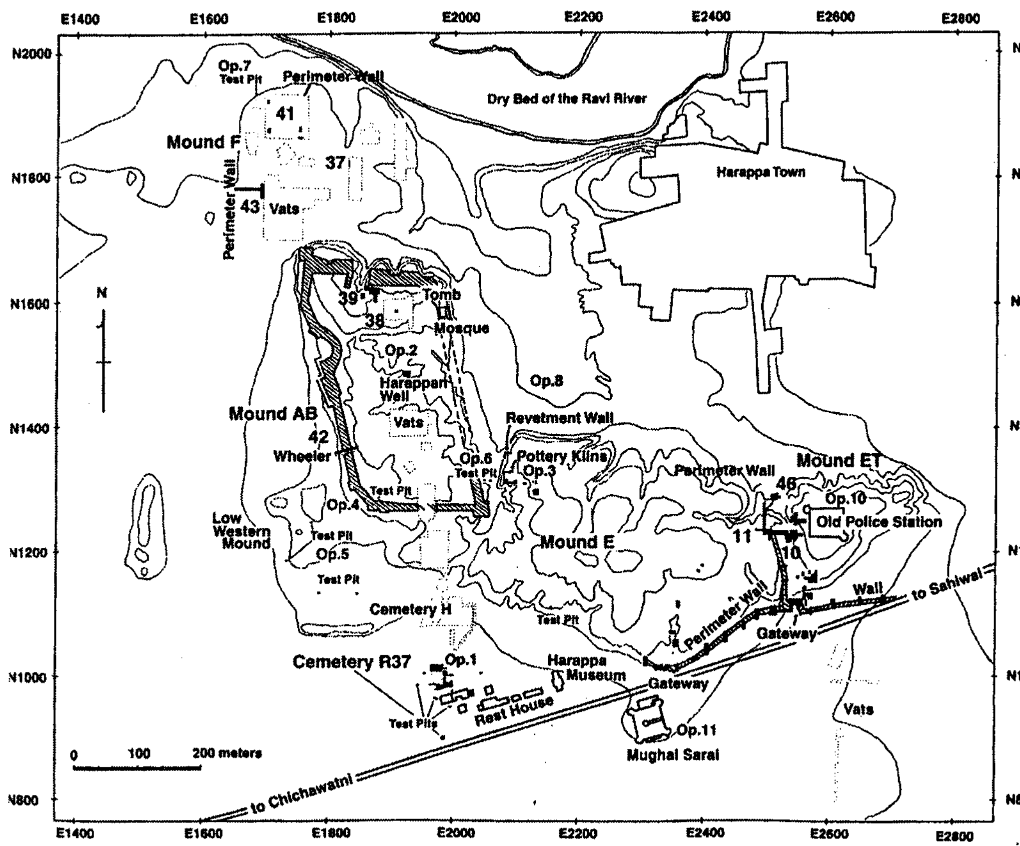


Figure 44: Plan of Harappa (after Meadow et al 1999)

Fortifications: The site of Harappa consists of the four main mounds: Mound AB, Mound E, Mound ET, and Mound F (see figure 44). Each of these mounds is fortified. When in 1946 Wheeler explored Harappa, he assumed that Mound AB, the highest of the four mounds, was a citadel. Consequently, one of the main purposes of the excavation that he undertook was to determine whether Mound AB was fortified and, in the case if fortifications were found, to determine their character and structural history. The results

of Wheeler's excavations were positive (see figures 45, 46). In most of his trenches, Wheeler traced the remains of massive mud and mud-brick structures. Having connected these remains on the map, Wheeler claimed that the plan of the defenses on Mound AB fell "roughly within the limits of a parallelogram, 400 yards by 200 yards" (Wheeler 1947: 64). As far as the structural history was concerned, Wheeler distinguished five main structural elements: mud-brick rampart, mud-brick wall, revetment, platform and rectangular towers (Wheeler 1947: 64-67). All of these elements, according to Wheeler, dated to the Mature Harappan period. Moreover, based on the alleged differences in pottery, Wheeler assumed that Mound AB was fortified by an alien group of people (Wheeler 1947: 93). In 1970, Mughal questioned the credibility of Wheeler's argument with regard to the date of the initial fortification on Mound AB. Mughal reasonably suggested that level 26A defined by Wheeler (Trench HP XXX) as containing Early Harappan Pottery was associated with the fortifications. Consequently, the construction of the initial fortification, Mughal argued, took place during the Early Harappan period (Mughal 1970: 127-131).

In 1997, Kenoyer reopened Wheeler's trench HP XXX. When originally excavated, this trench measuring 111 by 12/18 feet was cut across the western side of the Mound AB and reached natural soil. The reopened trench was renamed as HARP 42. The cleaning and redrawing of the sections revealed that a complete Early Harappan (Kot-Diji phase) period perimeter wall had underlain the Harappa phase fortifications (Meadow et al 1997: 14-15). Besides the walls, massive mud-brick platforms were detected on different sides of Mound AB. At least some of these platforms were constructed during the Kot-Diji phase (Meadow et al 1999: 3).

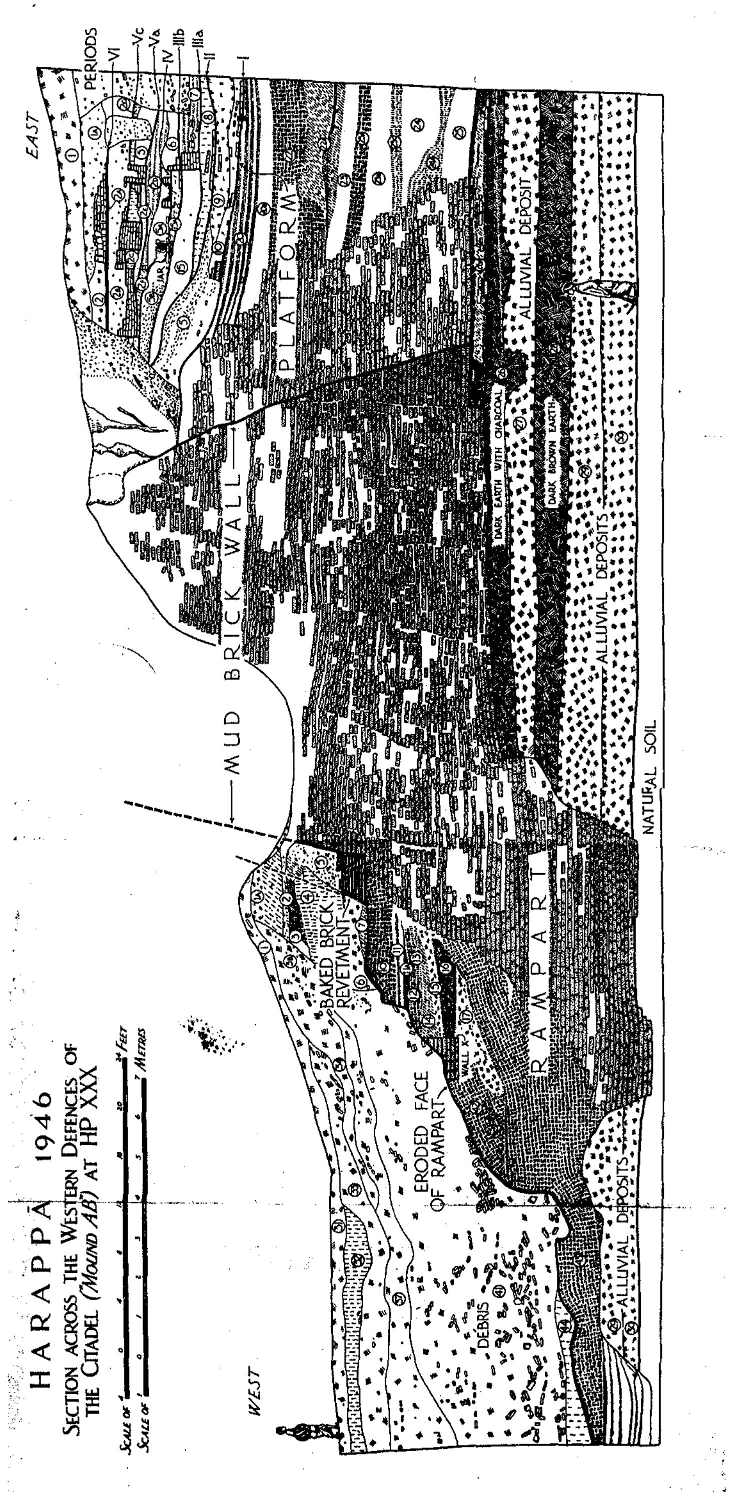
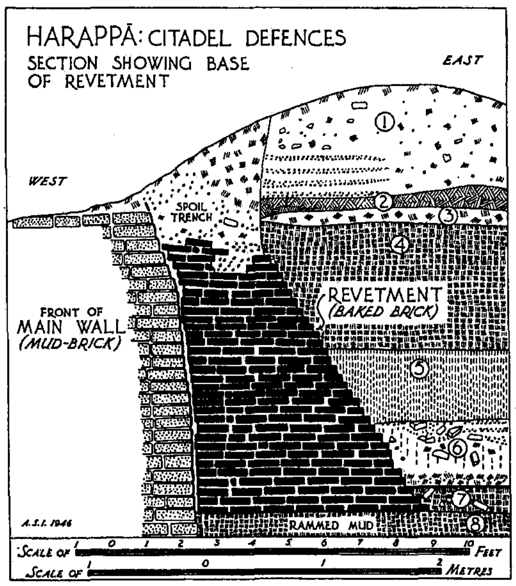


Figure 45: Section across the Defenses, Mound AB (after Wheeler 1962)

Mound F lies to the north of Mound AB and like Mound AB it drew much attention of the early explorers and excavators. Sahni, Vats and Wheeler excavated on Mound F extensively and disclosed a large number of structures the most known among which were "workman quarters", "granary", and circular platforms. No city walls however were found. In 1997, Kenoyer opened four trenches on Mound F. One of these trenches (41 NE) revealed two mud-brick perimeter walls: the first one built on natural sediment, and the second one built on top of the first one. The excavators suggested that these walls were constructed as a bund to protect the area of the "granary" from flooding (Meadow et al 1997: 13). The investigation of the city wall on Mound F continued during the season of 1998 and 1999. It was established that the perimeter wall was at some point 14 meters wide and included several phases of construction. No precise date of the initial construction was established, yet the pottery associated with the houses constructed against the interior face of the later wall [74-203] was assigned to Period 3C . Also, more evidence was collected to support of the interpretation of the function of the wall as a bund against flooding (Meadow et al 1999: 13-14).

Mound E lies to the southeast of Mound AB. Noticed and trenched in a limited fashion by Cunningham, this mound nonetheless remained unexcavated until 1987, when the HARP began active explorations on the mounds that were not given sufficient attention by the previous excavators. During the 1988 and 1989 seasons, perimeter walls made of large mud-bricks were unearthed in the northwestern corner of Mound E. Some of these walls were associated with Early Harappan (Kot Dijian) ceramics. The excavators suggested that since the exterior face of these walls was eroded (and the



Section of revetment of baked bricks in cutting HP XLV

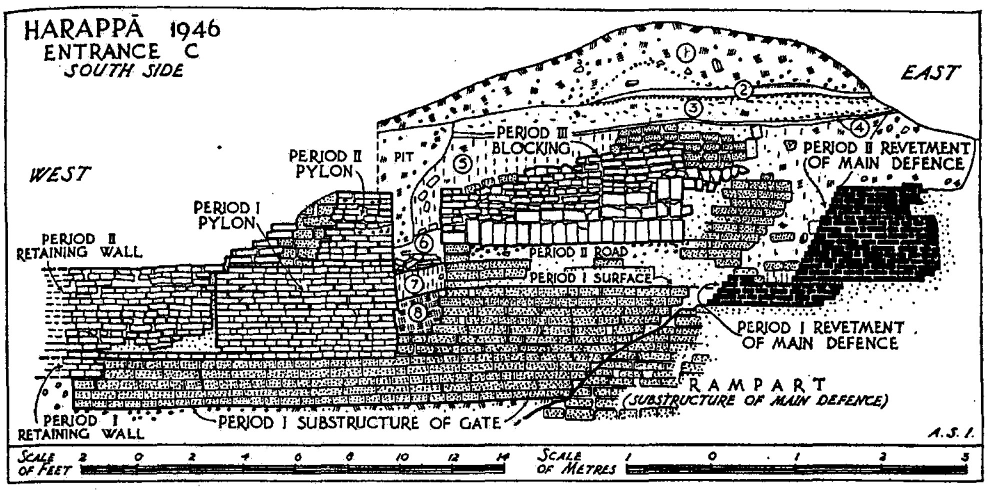


Figure 46: Sections of Defenses (after Wheeler 1947)

interior face was not), the walls may have served as "retaining or revetment walls" (Dales & Kenoyer 1991: 230). The earliest mud-brick platforms of Mound E were likely to be constructed during the Kot Diji phase as well. The remains of these platforms were detected on the western side of Mound E (Meadow et al 2001: 21). Further excavations revealed walls on southern, eastern and western sides of Mound E. It was determined that the wall on the southern and southeastern sides was free-standing and reached a height of at least 2 meters. The wall on the east side was possibly retaining. These walls were initially constructed during Period 3A, rebuilt during Period 3B and repaired during Period 3C (Meadow & Kenoyer 1993: 9, 36). The remains of a robbed baked brick wall were traced on the western side of Mound E. The earliest phases of this wall were dated to Kot Diji phase. In addition, a thin curtain wall paralleling the perimeter wall was discovered on the east side of the Mound E. The area between the curtain wall and the perimeter was filled with rubble (Meadow et al 1997: 4-6). Besides the walls, excavations on Mound E revealed a city gate and a corner bastion, both located on the southern side of the mound (Meadow & Kenoyer 1993: 9, 36).

To the east of Mound E lies Mound ET, the smallest of the four main mounds of Harappa. Excavations on this mound by the HARP revealed perimeter walls on the southern and western sides. The initial construction of the wall on the southwestern side was dated to ca. 2470 BC, Period 3A of the HARP sequence. Excavations showed that in the Harappan Period, this wall was likely to surround the entirety of Mound ET (Meadow et al 1995: 7). Another important feature of fortifications excavated on Mound ET is the Gateway Complex located in the southwestern corner, next to the southeastern corner of Mound E. As excavated by the HARP, the complex consisted of a gateway, side rooms, a

sewage drain, and a corbelled drain built in the middle of the gateway during its last structural phase. Interestingly enough, the entrance street was quite narrow, measuring ca. 2.6 meters in width. The gate underwent at least three stages of construction: the initial construction in Period 3A, renovations in Period 3C, and the blocking of the entrance in the last phase of the gate's use (Meadow et al 1995: 4-5).

Thus, recent excavations by the HARP have significantly altered the previous chronology and the understanding of the function of fortifications at Harappa. Today, we know that both Mound AB and Mound E were fortified during the Kot Diji phase. Whether these mounds were fully surrounded by walls as a one-time event is an open question. Nevertheless, it is clear that even the earliest Kot Dijian fortifications were quite massive and their construction would have certainly required a significant consumption of labor, as well as the presence of authority.

As far as the function is concerned, both the layout and structural history of fortifications indicate that from the time of initial construction, their function was ideational rather than utilitarian (military or ecological). To illustrate this, one must consider the following points:

1. Beginning with the Kot-Diji phase, segregation was one of the most distinctive characteristics of the layout at Harappa. Already during the Kot-Diji phase, the site was divided into two distinct areas, Mound AB and Mound E. During Period III, Harappa had at least four fortified areas: Mound AB, Mound E, Mound ET and Mound F.

2. Access to the areas enclosed by perimeter walls as well as communication between these areas was restricted and controlled. For example, the passage in the Gate

located in the southwestern corner of Mound ET was only 2.6 meters wide. Moreover during the later part of Period III, this passage was blocked.

3. The layout of Harappa was explicitly three-dimensional; for sectors, blocks and buildings stood on mud and mud-brick platforms of different heights.

Together and separately, these traits point to the ideational meaning of the Harappan fortifications. Moreover, judging from the structural history of fortifications – the blocking of gates, the disuse of perimeter wall, etc – this meaning must have experienced significant changes during the course of time. One thing is certain: the primary function of the walls, gates and platforms at Harappa was neither military nor ecological. Instead they reflected some important aspects of sociopolitical order and ideology. I will come back to this issue in the concluding part of this chapter.

Authority: Archaeological evidence for authority appears at Harappa during Period 2 (Kot Diji phase). Besides the construction of fortifications on Mound E and Mound AB, which in itself implies the presence of authority, this period marks a number of important changes in settlement size, settlement layout, as well as several aspects of material culture. The main changes that are indicative of authority can be summarized as follows:

Settlement size: Transition from Period 1B to Period 2 at Harappa marks a significant increase in size of the settlement. Although the deposits of Period 1 were detected both on Mound E and Mound AB, there is no evidence that these deposits represented the same settlement. On the other hand, the size of the Kot Dijian settlement at Harappa, according to the estimations by the HARP, was about twenty hectares and covered the entirety of Mound AB and Mound E (yet not the area between).

Settlement layout: A very important innovation of the Kot Dijian Period at Harappa is the segregation of residential areas, i.e., the emergence of distinct fortified sectors on Mound AB and Mound E. Whether this was a result of social stratification, of the idea of ritual purity or of a combination of the two is an open question (Kenoyer 1989a). It is however very likely that a system similar or prototypical to the one of varnas and asramas was responsible for such a layout. Another innovation of the Kot Diji Phase at Harappa is the alignment of streets and houses in accordance with cardinal directions: walls and streets in several trenches on Mound AB and Mound E were oriented north-south and east-west. Moreover in the northwest corner of Mound E, the layout of walls during the Harappan period was found to be similar to the one of the Kot Diji phase (Dales & Kenoyer 1992a: 6, Meadow et al 1999: 60-66).

Architecture: Besides the construction of fortifications, the architectural innovations of the Kot Diji Phase at Harappa include brick standardization and a general increase in structural activities. Mud-bricks with the measurements ratio of 1:2:4 have been found in the Kot-Dijian deposits on the northern side of Mound AB (Meadow et al 1999: 6) as well as in the northwestern corner of Mound E (Dales & Kenoyer 1991: 240). Also, it has been suggested that clay used for the bricks in the northwestern corner of Mound E was brought from different sources within the mound of Harappa (Dales & Kenoyer 1991: 230, 235).

Seals and Writing: There is no evidence of a fully developed writing system during the Kot-Diji phase. There are nonetheless many inscribed sherds. For example a step trench on the northern side of Mound AB has produced several interesting sherds and seals that are inscribed with the early Indus script (Meadow et al 1999: 6, 2001: 9).

Standardized weights and measures: At least one weight has been found in the stratigraphically sealed Kot Dijian context on Mound AB (Meadow et al 1999: 3). Otherwise, evidence for the existence of standardized weights and measurements during the Kot Dijian phase at Harappa is still scarce.

Crafts: Craft technology and its implications for sociopolitical organization at Harappa has been the focus of much research by the HARP. It is clear that many important technologies that characterize craft and jewelry production at Harappa were developed long before the transition from the Kot Diji to the Harappa phase. For example, the beads of the Kot Diji phase at Harappa were made of blue glazed faience, steatite, pecked/drilled carnelian, banded agate, lapis lazuli, serpentine and amazonite. Some of these materials constitute direct evidence for long-distance trade and exchange networks with areas as remote as Afghanistan and Gujarat (Meadow et al 1999: 7, 2001: 9).

Kalibangan

Reports and references: IAR 1960-61: 31-32; 1961-62: 39-44; 1962-63: 20-31; 1963-1964: 30-39; 1964-1965: 35-39; 1965-1966: 38-41; 1966-67: 31-33; 1967-68: 42-45; 1968-69: 28-32; B. B. Lal 1979, 1984b, B. B. Lal et al 2003, B. B. Lal & Thapar 1967, Newberry 1983b, Nigam 1995-1996, Raikes 1968, A. K. Sharma 1977-1978, 1982, 1999, Thapar 1973, 1975, 1977, 1979.

Introductory remarks: Kalibangan is located in the District Hanumangarh, Northern Rajasthan, on the southern bank of the Ghaggar River (see figure 47). It was

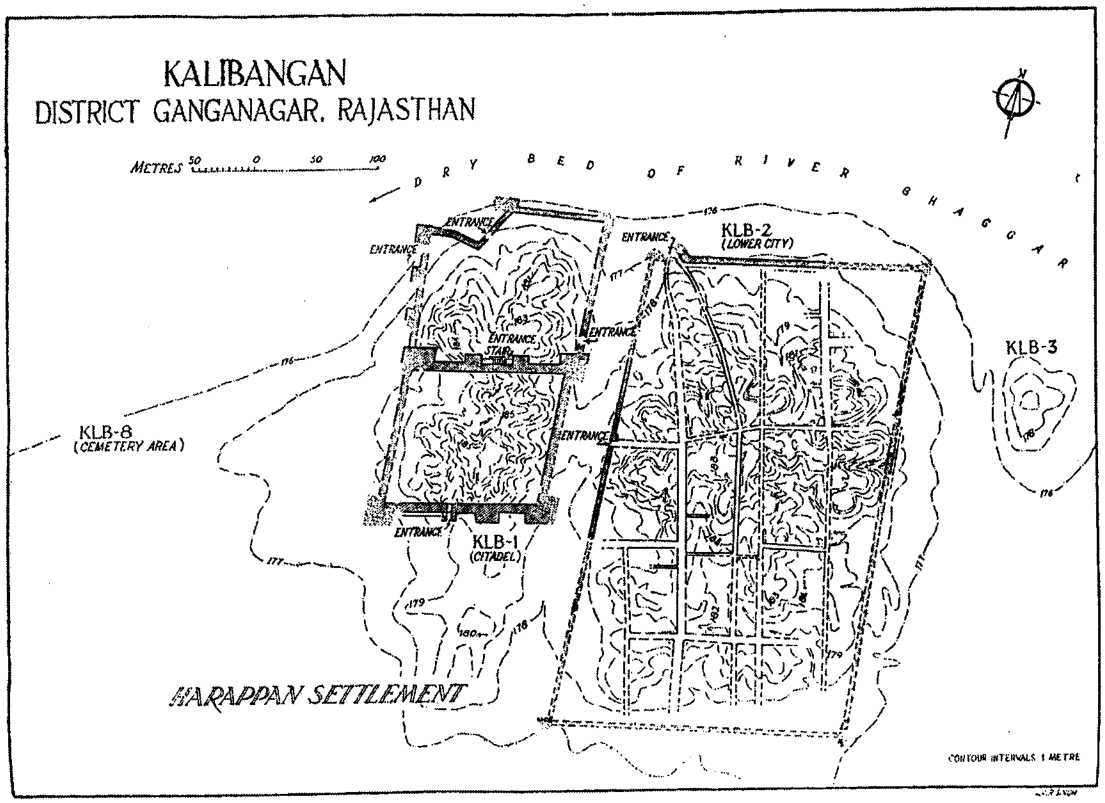


Figure 47: Kalibangan, Period II (after IAR 1968-69)

excavated for nine seasons in 1961-1969 by the ASI under the directorship of B.B. Lal, B.K. Thapar, and J.P. Joshi. The site rests on three mounds (KLB 1, KLB 2 and KLB 3) having an overall perimeter of approximately 2 km (B. B. Lal 1979: 65). The sequence defined by Lal consists of two periods separated by a break in occupation of approximately 100 years. Period I is pre-Harappan and is characterized by a fortified settlement and an adjacent agricultural field, both located on Mound KLB 1 that has an area of approximately 4.5 hectares (see figure 48). Lal dates this period to ca 3000-2700 BC (B. B. Lal et al 2003: 25-27). Period II is Mature Harappan and is characterized by

two fortified sections and an unfortified area, all lying on mound KLB 1 and 2. Taken together, the fortified sectors occupy an area of about 11.5 hectares. "With a margin of about fifty years on the earlier side and of about hundred years on the later," Lal dates this period to 2550 BC – 2000 BC (B. B. Lal 1997: 245-246). The results of the excavations at Kalibangan have not been fully published. Fragmentary reports have appeared in the IAR and the ASI has recently published a report on the excavation of the early Harappan settlement (B. B. Lal et al 2003).

Fortifications: Kalibangan was a fortified settlement both in Period I and Period II. The excavators believe that a mud-brick wall encircled Kalibangan right from the beginning of occupation (B. B. Lal et al 2003: 52). Judging from the available archaeological data, the construction of fortifications at Kalibangan underwent three main phases: the initial construction in Period I; the widening of the wall in Period I; and the construction of the system of perimeter walls, bastions, gates and platforms dividing the settlement in sectors in Period II.

The earliest wall built at the beginning of the Pre-Harappan Period was made of mud-brick and covered with plaster on both the external and internal sides. The basal width of this wall varied from 1.90 to 2.20 meters. In the second phase, the wall was widened and attained the width of 3.60 – 4.20 meters[52]. In the northwestern corner of the settlement there was an entrance (B. B. Lal et al 2003: 52-53). In Period II, fortifications underwent drastic changes. In response to the new layout of the settlement, the perimeter

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[52] These numbers are taken from the most recent report published in the MASI (Lal et al 2003: 53). An earlier report published in the IAR gives slightly different measurements, i.e. 1.90 m. for the first phase and 3.70-4.10 m for the second phase (IAR 1965-66: 40).

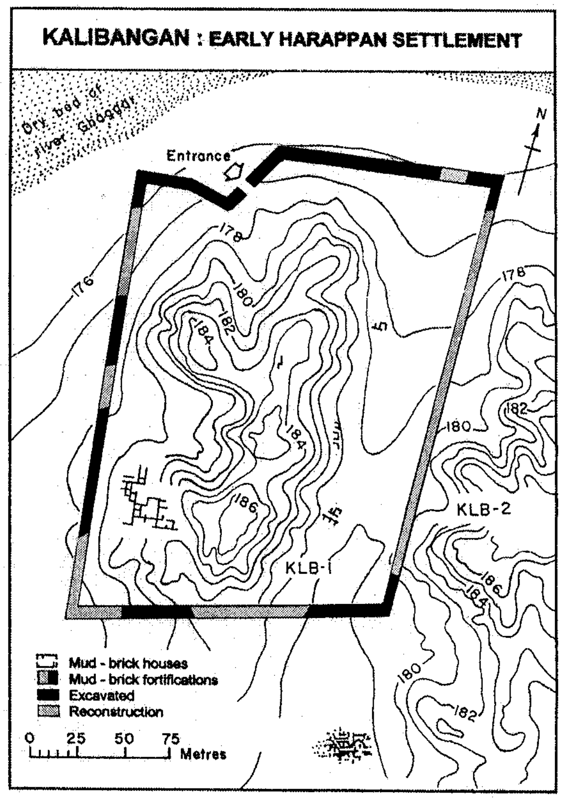


Figure 48: Kalibangan, Period I (after Lal 2003)

walls were built to encircle two distinct sections: the Western built on top of the previously existing Early Harappan settlement, and the Eastern founded on the adjacent mound.[53] In addition, the Western section was divided in southern and northern parts. The southern part was fortified heavier than the northern: it had thicker walls (up to 11 meters), corner towers, salients, and several mud-brick platforms. Unlike Harappa and

[53] I purposely avoid here using the terms "Citadel" and "the Lower Town"

Mohenjo-Daro, the platforms were separated from the walls and had no traces of structures on top of them (B. B. Lal 1979: 76-77).

Thus, the beginning of the Harappan period marked the creation of a fundamentally new fortification system. The emergence of this system was likely to be the result of the new sociopolitical order. Most importantly however, this system carried a segregative function, i.e. it divided the space at Kalibangan into four distinct areas: the southern part of the western section, the northern part of the western section, the eastern section, and the unfortified area south of the western section (see figure 47).

It is tempting to create a hierarchy of these sections based on differences in size, architecture, finds and the type of surrounding fortifications. The southern part of the western section, for example, has mud-brick platforms and is the most heavily fortified. The eastern section is the largest, has regular planning, and is filled with domestic architecture. There are many possible ways to interpret these differences. One thing however is clear. To protect the site from floods or military attack, there is no need to divide it in sections. What the division in sections indicates is that fortifications at Kalibangan had an ideological rather than utilitarian meaning. Moreover, it is likely that at least some elements of this meaning were shaped during the Pre-Harappan Period. Four following observations support this assumption. First, during the initial phase, the walls were too thin to protect the settlement from any significant threat. Second, no evidence for flooding was established during the excavations. Third, despite the drastic nature of innovations that took place in the beginning of Period II, there was a significant degree of continuity between the Pre-Harappan and Harappan fortifications. For example, the walls built on the Western Mound during the Pre-Harappan Period were fully

incorporated into the fortification system of the Harappan period (IAR 1965-66: 41) (B. B. Lal 1979: 76, B. B. Lal et al 2003: 41). Fourth, south of the fortified area the excavators discovered the remains of an agricultural field (B. B. Lal et al 2003: 95-98). If the identification and dating of this field is correct, it is not unreasonable to suggest that one of the functions of perimeter walls in Period I was to separate spaces between agricultural and domestic worlds.

In sum, regardless of what the precise function of the fortification system at Kalibangan was, it is clear that ideational and symbolic factors played a key role in its initial construction and further renovations.

Authority: Even a brief comparison of the main traits of Period I with the main traits of Period II shows that archaeological evidence for authority emerges in Kalibangan in Period II. The traits that are most indicative of authority in Kalibangan are size, layout and architecture.

Size: In Period I, settlement did not exceed 4.5 hectares including the fields. The area encircled by a mud-brick wall was roughly about 3 hectares. By Period II, the site significantly expanded and covered at least 13 hectares. Whether the site grew in size during Period I is unclear. As mentioned above, the excavators believe that the site was surrounded by a mud-brick wall from the very beginning of Period I. In sum, judging from currently available data, it appears that the beginning of the Harappan period marked the most significant increase in site size in the history of Kalibangan.

Layout: The excavators give contradictory information with regard to the orientation of streets and houses in Period I. Lal maintains that houses and streets of Pre-Harappan Kalibangan were "oriented roughly along the cardinal direction" (B. B. Lal et

al 2003: 27). J. P. Joshi, on the other hand, unequivocally states that structures of Pre-Harappan Kalibangan "do not follow strict cardinal direction and run slightly oblique" (B. B. Lal et al 2003: 51). Judging from the top plans provided in the final report (B. B. Lal et al 2003: figs. 11-17), Joshi is right. Neither streets nor walls of the Pre-Harappan Period at Kalibangan display regular planning and orientation along the cardinal directions. The layout of Period II, on the other hand, is fundamentally different. As mentioned above, in the beginning of Period II, the site was divided in four sections. The internal layout also changed. A grid pattern became characteristic of the street layout both in the western and eastern sections. The concentration of large platforms in the southern part of the western section implies a religious or sociopolitical significance of this area.

Architecture: The pre-Harappan architecture of Kalibangan is quite homogenous and modest. The excavators justly characterize it as oblique and lacking structural maturity (B. B. Lal et al 2003: 51). In Period II, most traits of domestic architecture remain the same. Houses consisting of several rooms around the courtyard, the means of sanitation and the lack of noticeable differentiation in wealth are characteristic of both Period I and Period II (B. B. Lal 1979: 83-84, B. B. Lal et al 2003: 53). Nonetheless, two important innovations take place in the beginning of Period II. First, the new system of fortifications is constructed. Second, four large mud-brick platforms are built in the southern part of the western section.

Taken together, changes in these traits indicate changes in ideology and social structure. Lal, for example, believes that the division of the settlement in fortified sections was a reflection of the three-tier social hierarchy. According to him, the northern part of the Western section was populated by religious leaders who conducted religious

ceremonies in the southern part of the Western section. The Eastern section was populated by "agriculturalist-cum-traders". Finally, the area south of the Western section, was populated by "the working class which, though not living below the poverty-line, was certainly under-privileged for it was the only section of the society which was left "unfortified" (B. B. Lal 1984b: 61).

Most of Lal's suggestions are clearly off the mark. The existence of distinct fortified sections is not sufficient evidence for a rigid social hierarchy. Moreover, the homogeneity and relative modesty of architecture, artifacts and burials point to the heterarchical rather than hierarchical structure of social organization. In one respect, however, Lal is right. Regardless of what the social organization was like in Kalibangan, it is clear that the changes in size, layout and architecture that took place in the beginning of Period II indicate the presence of authority. Whether this authority was religious, political or a combination of the two is an open question. Judging from the lack of evidence for conspicuous consumption, it is likely that this authority was part of a unique heterarchical system of social organization.

Kot Diji

Reports and references: Khan 1959, 1960, 1964, 1965, Mughal 1970.

Introductory remarks: The site of Kot Diji is located next to the Pakistan national highway 15 miles south of Khairpur (see figure 49). The mound on which the site lies occupies approximately 2.2 hectares and measures ca 600 by 400 feet (Khan 1965: 13-14). Kot Diji was excavated by F.A. Khan on behalf of the Department of Archaeology, Government of Pakistan, in 1955-1957 (Khan 1965: 14-15). During two seasons of

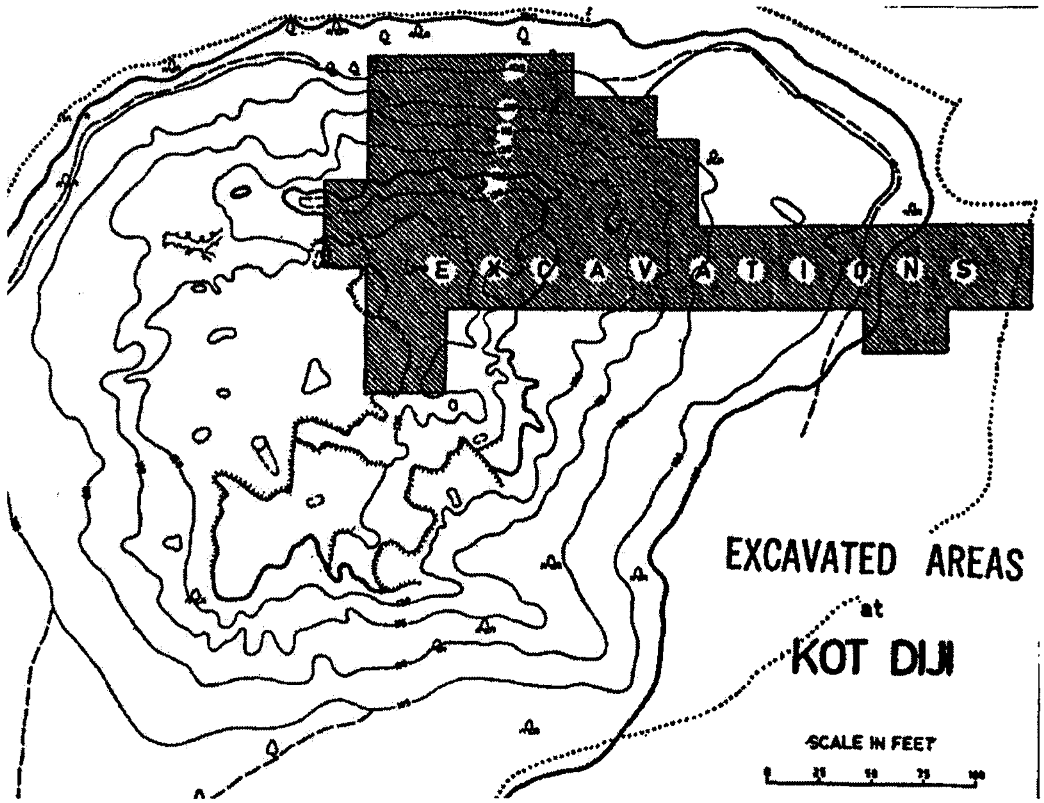


Figure 49: Contour Map of Kot Diji (after Khan 1965)

fieldwork, Khan excavated two large trenches: 160 by 40 ft and 160 by 140 ft. As the result of these excavations, Khan divided the site in two parts: the Citadel or Area A and the Outer City or Area B[54], and defined two broad occupational periods: Kot-Dijian (Pre-Harappan) and Mature Harappan. There are only 4 radiocarbon dates for Kot Diji, which

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[54] Since the terms 'Citadel' and 'Outer City' are heavily interpretative, I shall hereon refer to 'Area A' and 'Area B'.

roughly place the Kot-Dijian levels in the middle and before the middle of the 3rd millennium BC (Khan 1965: 85).

The stratigraphy of Kot Diji is complicated. Khan defined two separate sequences: one for the Area A and another one for the Area B. The sequence of Area A consisted of 16 layers whereas the sequence of Area B of only 5 (Khan 1965: 31-35). The correlation between these two sequences in Khan's original report was very confusing. In 1970, R. Mughal revised Khan's chronology and until today Mughal's correlation of the two sequences remains the main source on the periodization of Kot Diji (Mughal 1970: 52). Based on this correlation as well on Khan's original sequence, a new periodization of Kot Diji is proposed in the ensuing analysis.

Fortifications: The earliest fortification wall at Kot Diji was detected in a small sounding in Area A in association with layer 15, i.e., the second layer (from the bottom) of the Area A sequence. The remains of this wall were made of stone (Khan 1965: 28). The later wall – not clear of which exact Kot Dijian layer – was quite imposing (see figure 50). Its core was made of mud-brick yet the lower part was built with undressed limestone blocks set with mud mortar. The wall had some stone revetments and was strengthened with bastions. The bastion excavated in the northeastern corner measured 31.5 by 20 feet. The extant height of the wall varied from 12 to 14 feet (Khan 1965: 29). Interestingly, the wall ceased to be used during the later phases of Kot Dijian Period.

Khan notes that the thick debris was formed on top of the wall in layer 8. Moreover, "a wide drain… lined with small stone blocks" going right over the fortifications wall was uncovered in layer 7 (Khan 1965: 26). No wall whatsoever was detected in the Harappan layers (Khan 1965: 17-21).

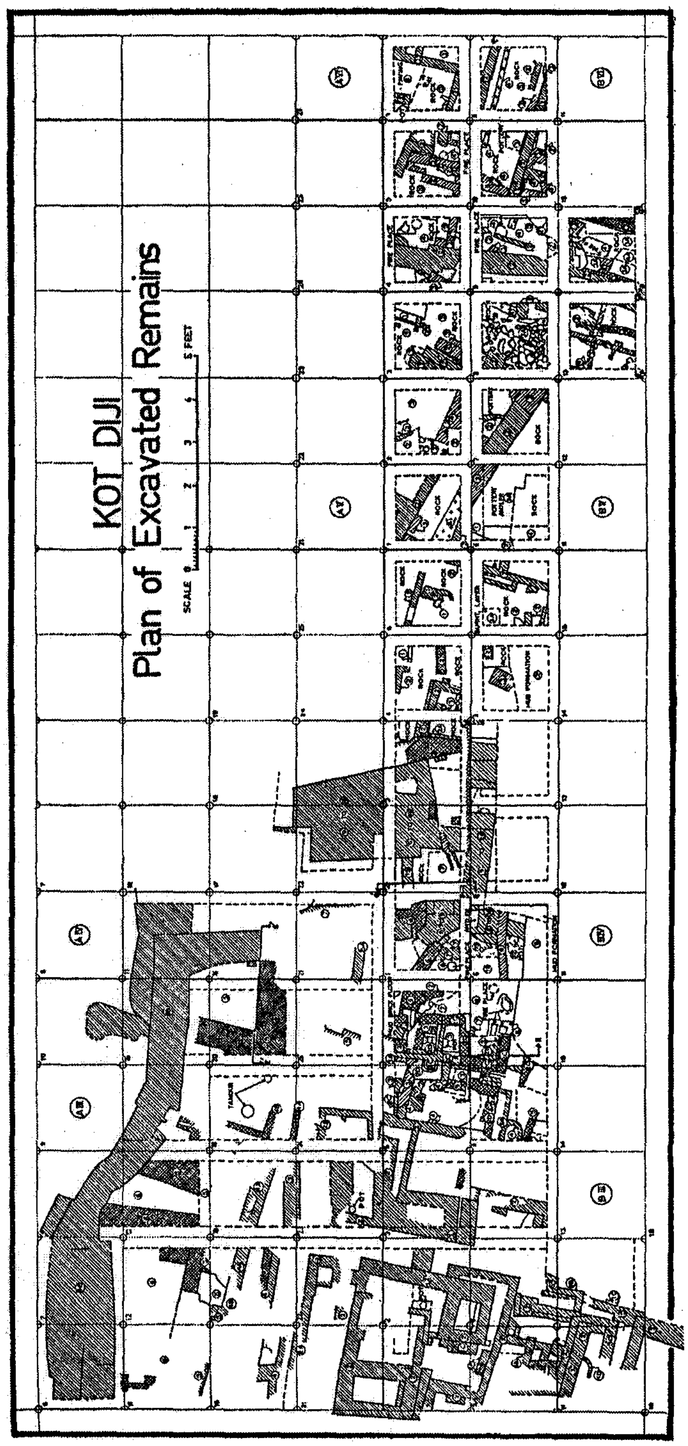


Figure 50: Excavated Areas of Kot Diji (after Khan 1965)

Table 9: Main Cultural Transitions at Kot Diji (after Khan 1965)

Major Cultural and Structural Changes	Layer
The beginning of occupation in Area A	Layer 16
The construction of the first fortification wall	Layer 15
The construction of revetments and bastions	Layer ?
The emergence of an architectural pattern characterized by stone foundations and mud brick superstructures	Layer 7
The degeneration of fortifications	Layers 8-7
The expansion of the settlement	Layer 7
The emergence of the typically Harappan objects	Layer 7
Conflagration and the abandonment of the site	Layers 4-3A
Reoccupation of the site	Layer 3A
The spread of Mature Harappan pottery	Layer 3A
The abandonment of the Area B	Layer 2
The end of occupation	Layer 1

Fortifications at Kot Diji thus present a very interesting yet obscure case. The case is interesting because fortifications were built very early, were used throughout the most of Kot Dijian Period, but fell in disuse during the Harappan Period. The case is obscure because the structural history of the wall, revetments and bastions was poorly investigated. The excavator apparently did not correlate structural modifications with the stratigraphic layers. Moreover, the wall was traced only in a limited area and no entrance or gate was detected. As a result, the current data on fortifications at Kot Diji raise more questions than provide answers. The most intriguing among these questions is the

function of the wall considering that it fell into disuse in the final stages of Kot Dijian Period. Given the current state of data, it is very difficult to address this question. Nonetheless, Khan's report and Mughal's revision of Khan's periodization provide a few helpful hints. First, both Khan's stratigraphy and Mughal's revised chronology show that the wall falls into disuse before Area B is settled. The first structural activities above the wall are associated with layers 8 and 7 (Khan 1965: 26) and the earliest layer of the Area B correlates with the layer 7 of Area A (Mughal 1970: 52). In other words, the expansion of the settlement starts with structural activities above the walls (Layer 8) and leads to the establishment of the new residential area beyond the walls (Layer 7). In terms of function, this means that the wall never truly divided Area A and Area B: by the time Area B was established the wall was no longer in use. Second, judging from the expansion of the site, the new patterns in architecture, and the new traits of material culture, the most efflorescent period at Kot Diji begins with Layer 7 (Khan 1965: 25-26). This means that the wall was functional during the formative portion of the Kot Dijian period and dysfunctional during its cultural peak. Third, the falling of the wall into disuse has no clear parallels in material culture. If the wall had played an important role in the sociopolitical life of the community, one would expect that its degeneration would have been accompanied by similar changes in material culture, settlement layout or architectural pattern. Archaeological record, however, displays the opposite: the layers that follow the degeneration of the wall show nothing but the gradual sophistication of sociopolitical complexity.

The least that these three observations show is that the sociopolitical or religious segregation that characterized fortifications of other Harappan settlements was not

important at Kot Diji. Paradoxically, the sophistication of the sociopolitical organization made it possible for the fortification system to degenerate. This could be possible under many scenarios. The fortification system at Kot Diji could be built as the symbolic demarcation of the settlement's border, as the support for the houses located on the interior of the wall, or as the protection from a military attack. I will return to the case of Kot Diji in the final part of this chapter.

Authority: Khan viewed social organization of Kot Diji as the direct reflection of its bipartite layout and discontinuous bipartite cultural history. With regard to the layout, he noted:

> The Kot Diji site consists of two parts: one comprising the citadel area where lived the ruling classes; and the other, the outer part of the city, which must have been inhabited by the artisan classes (Khan 1965: 15).

With regard to the break in cultural sequence, Khan offered another straightforward explanation:

> This prominent and clearly marked burnt layer strongly suggests that the last occupation level of the early settlers (that is, the Kot Dijians) was violently disturbed, and probably totally burnt and destroyed. The sudden disaster was indeed connected with the movement of newcomers into this part of the country (Khan 1965: 22).

I believe both of these comments are off the mark. They are based on the erroneous understanding of the site's layout and cultural history, both of which need to be reconsidered prior to any discussions on social organization and authority. As noted above, the wall was not functional at the time when 'the outer city' was established. Moreover, located on the same mound, Areas A (the citadel) and B (the lower city) were neither separated from each other nor displayed any differences in architecture or material culture. Hence, not only defining 'the citadel' and 'the outer city', but also dividing the site into two sections was erroneous. It is needless to explain that under such

circumstances the use of the Kot Diji layout as evidence for social division and authority is groundless.

As far as the cultural history of Kot Diji is concerned, the division into two periods – Kot Dijian and Harappan – is too simple to reflect even those few cultural changes that were recorded by Khan. According to the periodization defined by Khan, conflagration marks the end of Period I, Period II begins with the reoccupation of the site and the spread of the Mature Harappan pottery. Khan thus sees only one turning point in the cultural history of Kot Diji, i.e., a break of occupation stratigraphically associated with layers 4 and 3A. Nevertheless, at least two more transformations play crucial roles in the history of Kot Diji. The first one is stratigraphically associated with layer 7 and comprises a whole group of changes: the site grows in size, fortifications fall into disuse, the new architectural patterns emerge and a number of typically Harappan artifacts appear. The second transformation is stratigraphically associated with layer 2 and is marked by the abandonment of Area B. Both transformations are significant enough to split the sequence into more periods. The sequence should thus consist of the four cultural periods, each defined by a distinctive set of traits and tied to the concrete stratigraphic layers of Area A:

Period I	Layers 16-8	* Mud brick and occasional stone architecture
		* Construction, renovation and degeneration of the fortification system
		* Kot Dijian pottery
		* Kot Dijian assemblage of artifacts.

Period II	Layers 7-4	*	Expansion of the settlement
		*	Complete degeneration of fortifications
		*	Emergence of the new architectural pattern: stone foundations with mud brick superstructures
		*	Coexistence of Harappan and Kot Dijian elements in pottery and other traits of material culture
Period III	Layers 3A-2	*	Mature Harappan material culture
		*	No fortification
		*	Minimal architectural remains
Period IV	Layers 2-1	*	Abandonment of the Area B
		*	Mature Harappan material culture
		*	Minimal architectural remains

Now turning to authority, one faces an interesting situation. Archaeologically, Pre-Harappan periods seem to provide more evidence for social complexity and authority than Harappan periods. In Period I, evidence for authority is provided by the structural history of fortifications. Even though specific phases of this history are very poorly known, it is clear that the construction of massive walls, bastions and revetments must have required a significant organization of labor. In Period II, authority can be envisioned as part of the general growth of social complexity. I believe, this period presents the cultural apogee of ancient Kot Diji: the settlement expands in size; architecture becomes more durable and socially differentiated; the new cultural elements emerge. Undoubtedly,

these changes were accompanied by the sophistication of social organization and possibly the emergence of new social order. The new social order in its turn made it possible to no longer maintain massive fortifications. Somewhere in this picture there must be a place for authority, the scale and nature of which remain an open question. The next two periods nevertheless display little evidence for the growth of social complexity. The site gradually decreases in size, architectural remains are minimal and despite of the emergence of the Indus script there is little evidence for its use at Kot Diji.

To conclude, Kot Diji was an important site during the Pre-Harappan periods and the site of little significance in the time of the efflorescence of the Indus civilization. If authority was indeed present at any time at Kot Diji, it must have been present during Period II of my periodization, or the later part of Period I according to Khan's periodization.

Lothal

Reports and references: IAR 1954-55: 12; 1955-56: 6-7; 1956-57: 15-16; 1957-58: 11-13; 1958-59: 13-15; 1959-60: 16-18; 1961-62: 9-10; 1962-1963: 7; B. B. Lal 1985a, Leshnik 1968, Pandya 1977, Panjwani 1989, Possehl 1975, Raghunath 1984, Rao 1963, 1968, 1969, 1973, 1979, 1985, Schmokel 1966, Yule & Rao 1982.

Introductory remarks: Lothal is located between the Bhogawo and Sabarmati Rivers, 80 km southwest of Ahmadabad, Gujarat. It was discovered in 1954 by S.R. Rao during his exploration of the Sabarmati River. From 1955 to 1962, Rao excavated at Lothal on behalf of the ASI. The cultural sequence defined by Rao consisted of two periods: Period A (Mature Harappa) and Period B (Late Harappa). These two periods in

turn comprised five structural phases, each sub-divided into two or three sub-phases (see figure 52) (Rao 1979: 24-36):

Period A	Phase I	ca. 2450 BC – 2350 BC
	Phase II	ca. 2350 BC – 2200 BC
	Phase III	ca. 2200 BC – 2000 BC
	Phase IV	ca. 2000 BC – 1900 BC
Period B	Phase V	ca. 1900 BC – 1600 BC

The dates of the phases as ascribed by Rao are based on a comparative stratigraphy and a small number of radiocarbon samples (Rao 1979: 37-46). They are often confusing and should be considered with caution. For example, none of the dates of the second series confirms the dates of the first series (Rao 1979: 39), as well as the dates for phases IV and V vary from place to place in Rao's report (Rao 1979: 37-46). Also, it is likely that Lothal was occupied long before 2450 BC; the first settlement at Lothal was represented by a local Chalcolithic culture that preceded and possibly overlapped with Mature Harappan. Otherwise, the periodization of structural activities at Lothal appears to be quite accurate (Rao 1979: 53-70).

Fortifications: A system of fortifications at Lothal consists of a mud-bund, a mud-brick perimeter wall (Rao calls it 'peripheral wall') and several platforms built of mud and mud-brick (see figures 51, 53). The initial mud bund, 52 ft wide at the base and 42 feet at the extant top, was reportedly built in Phase 1, at the time when Lothal was a small pre-Harappan settlement (Rao 1979: 85). In phase 2, the mud-bund was reinforced by a mud-brick wall. The height of this wall varied from 6 to 8 feet and the width varied

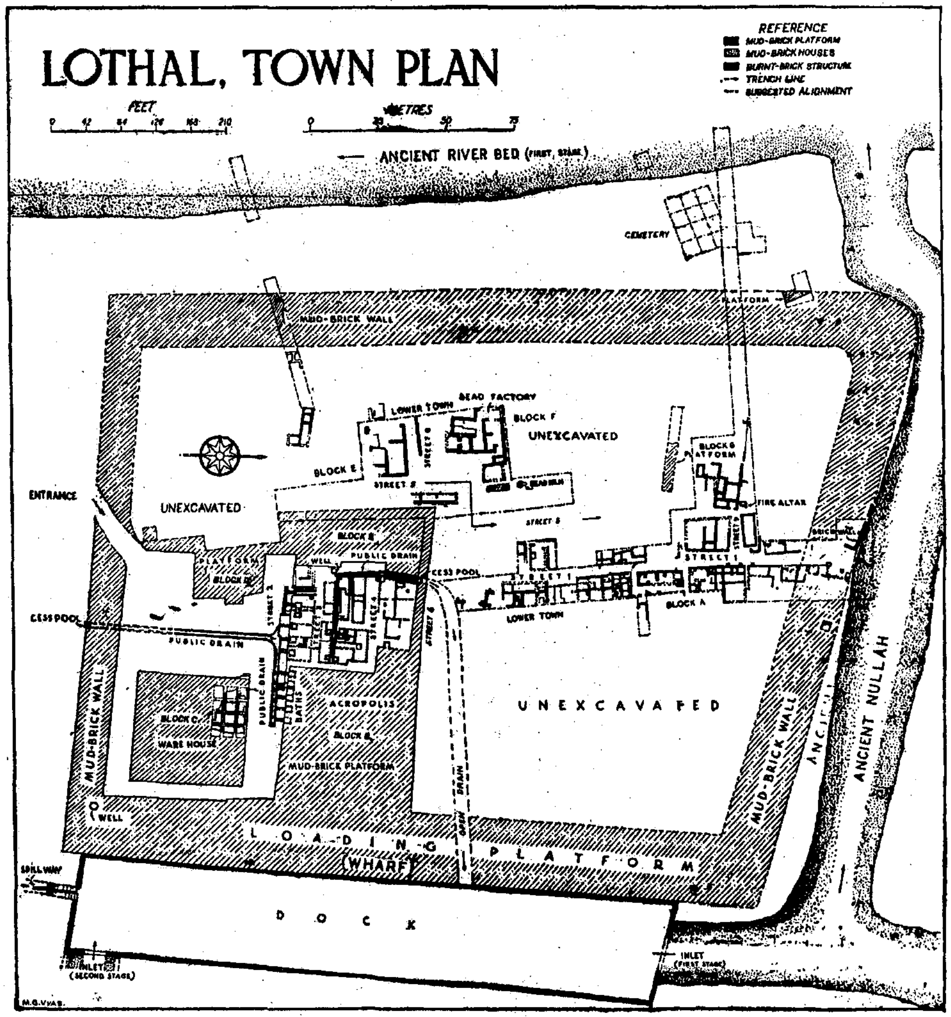


Figure 51: Lothal (after Rao 1973)

from 42 to 72 feet. The northern and western sides of the wall were reportedly revetted from outside. Judging from Rao's excavations, there were no gates or bastions. Most platforms, according to Rao, were built during Phase IIA, allegedly as a response to the massive flood that destroyed much of the previously existing settlement around 2350 BC.

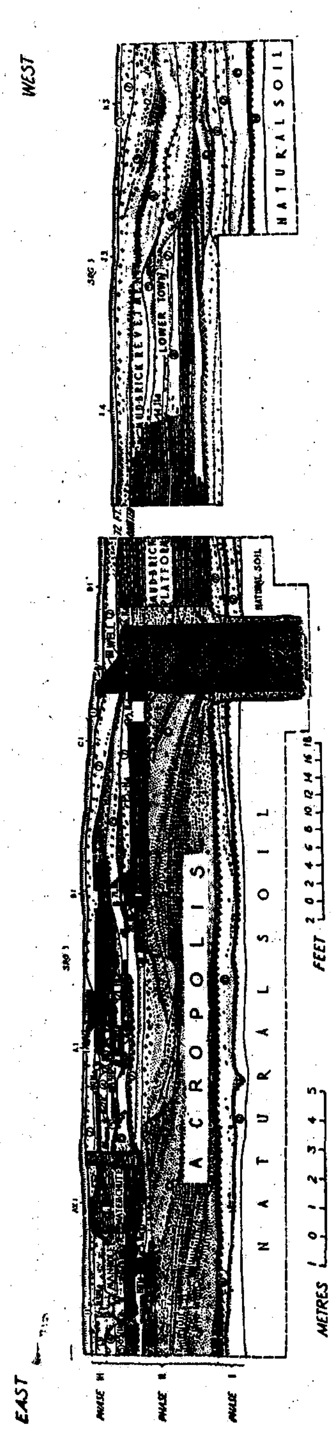


Fig. 13.
Lothal: Section through a part of Acropolis and Lower Town.

Figure 52: Lothal, Section (after Rao 1973)

Because of the large horizontal exposures, Rao was able to investigate the technology and structural history of platforms. The first layer of the platforms was typically made of rammed kankar, clay or earth. The top layer was laid with several courses of mud-bricks. Most platforms underwent several stages of reconstruction (Rao 1979: 115).

In sum, by Period IIA, the entirety of the excavated settlement stood on terraced platforms and was surrounded by a mud-bund with a mud-brick wall on top. The total enclosed area measured approximately at 550 x 365 m (Rao 1979: 85).

As far as the function of this fortification system is concerned, Rao discards the military function (Rao 1979: 87) and asserts that both the system of platforms and the wall served mainly as the protection against floods. I believe Rao is right in saying that the element of defense was either minimal or did not play any role at all in the construction of fortifications. Indeed, the shape and height of the wall, as well as the lack of bastions and gates show that military defense was not the primary concern for the people who had these fortifications built during Phase IIA. Nonetheless, I believe it is too simplistic to view the function of fortifications at Lothal only as the protection against floods. In this respect, I would suggest considering the following traits.

1. There is only one entrance to the enclosed space at least until Phase III. It is located in the south of the site behind the so-called Acropolis. Rao describes the Acropolis as "a formidable fortress, in the shadow of which stood the Lower Town providing shelter to the ordinary citizens" (Rao 1973: 66). If Rao were right and the ruler or a group of rulers indeed lived on the Acropolis, the commoners, who according to Rao lived in the Lower Town, would have to bypass the residence of the ruler and the

warehouse every single time they needed to enter or exit the city. Obviously, such a scenario is unlikely.

2. The entrance has no traces of a gate; it basically presents an opening in the mud-brick wall. From the point of view of the protection from floods or a military attack, such an opening simply makes no sense.

3. All buildings in the fortified area stand on platforms of different height. For example, the Acropolis stands on platforms that were about 12 feet above the ground level (Rao 1979: 86). The adjacent block A, or as Rao called it "the bazaar part of the Lower Town" (Rao 1979: 88) stands on platforms that on average are only 2 to 4 feet in height. The desire to protect the city from floods is an understandable cause for the construction of platforms, yet it is clearly insufficient for explaining why the height of platforms was different in different parts of town.

4. Some platforms did not have structures on top of them. Rao calls such platforms 'peripheral' (Rao 1979: 111, 113, 115) and seems to believe that originally they had structures on top of them, yet in the course of time the structures were completely eroded. For example, block D is represented by a platform measuring 96 by 80 feet in size and 9 feet in height. This platform is located across from the warehouse and next to the ruler's residence. It was initially built in Phase IIA and underwent several stages of reconstruction (Rao 1979: 115). Rao believes that judging from its massive size and position, this platform must have supported a "public building no less important than the warehouse" (Rao 1973: 66). In a similar way, a significant part of the platform that underlies the alleged warehouse itself (Block C) is empty. Rao believes that originally the entirety of this platform was covered by a superstructure which later eroded (Rao 1979:

111-113). Obviously Rao's interpretations are hypothetical and no archaeological evidence has been so far obtained to verify them. The fact remains that some of the platforms on the Acropolis are either completely or partially empty and have no remains of structures of top. A similar situation was observed during the excavations of Kalibangan, which Lal interpreted as a sign of ritual activities (B. B. Lal 1984b). In the case of Lothal, one must admit that there is no archaeological evidence at the moment that could produce even a hypothetical explanation.

Taken together these traits lead us to an interesting conclusion. Besides serving as protection from floods, the fortifications at Lothal carried a clear non-utilitarian function. The lack of entrances may indicate the intentional restriction of access due to the existence of social segregation. Great variability in the height of the platforms points to the symbolism of three-dimensional space and the iconographic use of elevations. Finally, the circumference of the settlement by a mud-brick wall may reflect the desire to demarcate ideologically significant space of the inner city and to divide it from the adjacent areas.

Authority: The excavator of Lothal S.R. Rao seems to have had a rather clear vision of the political situation in Lothal during its entire history. According to Rao, Lothal was governed by the ruler who lived on the Acropolis in Block B (Rao 1973: 62). Explaining the choice of location for the ruler's mansion, Rao noted:

> ...an impressive structure had to be erected for accommodating the ruler in such a vantage position that he could supervise the transactions of the warehouse on the one hand and the movement of ships in the dockyard on the other (Rao 1973: 56).

The ruler, according to Rao, was responsible for the important architectural modifications and the daily functioning of the community. As Rao asserted, "the

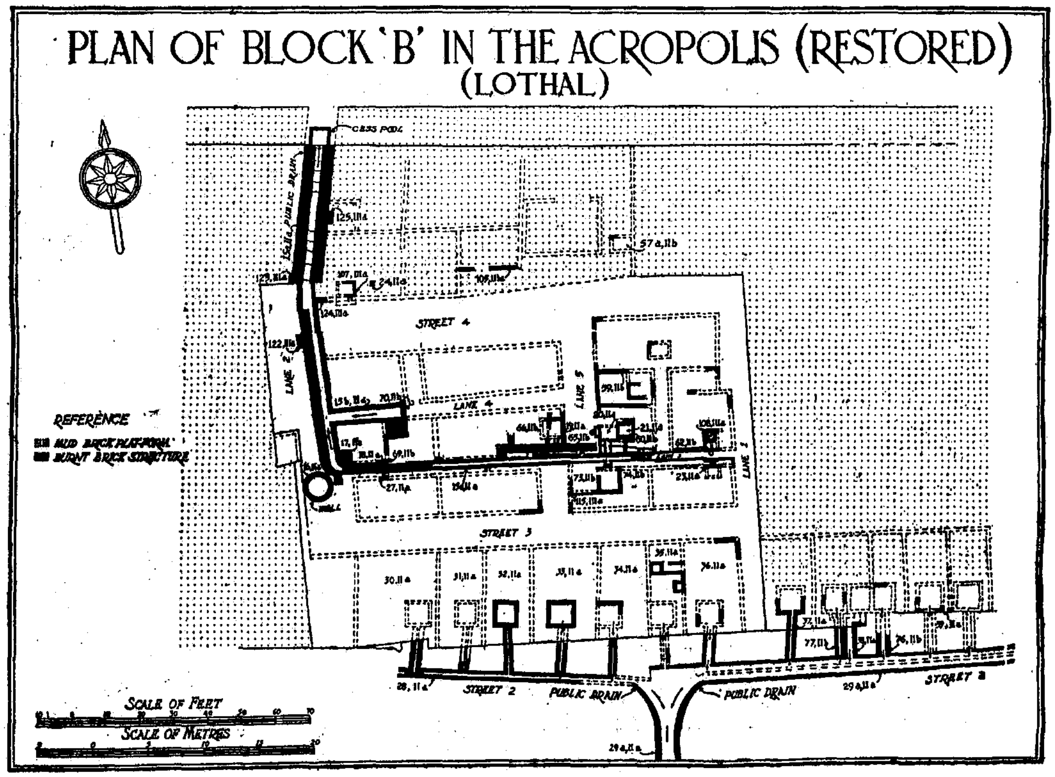


FIG. 14.

Figure 53: Lothal Acropolis (after Rao 1973)

ruler derived his authority not from any religious sanctions but from the willing co-operation of the common people… He provided civic amenities in the Acropolis as well as the Lower Town and enforced regulations strictly…" (Rao 1979: 227). During Phase IV, Rao believed, the authority of the ruler – at this point, Rao (Rao 1979: 228) called him a merchant-prince – waned following a general decline of Lothal. The Acropolis at this time, according to Rao, was occupied by artisans and craftsmen (ibid). As far as the location of the ruler's residence is concerned, Rao apparently relied on the fact that block

B stood on the highest platform and the rooms unearthed on it were significantly bigger than the rooms of the Lower Town. As far as the ruler's functions and various mechanisms of power are concerned, Rao's statements and assumptions are purely speculative and there is no way to test them against the existing archaeological record. Also, it is unclear how Rao arrived at the conclusion that the structural remains of Block B represented one large mansion instead of several separate houses.

Leaving aside Rao's speculations, one must admit that the archaeological record of Lothal is currently mute with regard to the form and mechanisms of authority. What it provides enough data for is the emergence of authority per se, and the correlation of its emergence with the relative chronology of Lothal. Phase I of the Lothal's cultural sequence is very poorly known. To a large degree, it may be due to the fact that the remains of Phase I are hidden under the mud-brick platforms and architecture of Phase II. On several occasions Rao managed to trace the remains of mud-brick walls and even possibly of a mud-brick platform in the context of Phase I (Rao 1979: 88, 100, 111). Otherwise, the remains of Phase I are too fragmentary to display the level of complexity indicative of a strong authority. The clear evidence for authority emerges in Lothal with the transition to Phase II A. Besides the construction of a fortification system discussed above, this phase is characterized by a number of drastic changes with regards to settlement size, settlement layout and the various aspects of material culture:

Settlement size: On one hand, it seems reasonable to assume that during Phase I the settlement was smaller than the fortified settlement of Phase II; Rao reports that the deposits of Phase I were detected only in parts of Blocks A, B and C, i.e. mostly on the southern side of the fortified settlement underneath the Acropolis and the Warehouse

(Rao 1979: 85, 88, 100, 111). On the other hand, one must remember that the fortified settlement was quite small. As mentioned above, the total area enclosed by peripheral walls occupied an area of approximately twenty hectares. Most importantly however the circumference of the initial mud bund appears to have been identical with the circumference of the later peripheral wall; In fact, Rao believes that the wall was built on top of the mud-bund. If Rao's structural analysis is correct and the mud-bund was initially built during Phase I and then strengthened by a mud brick wall during Phase IIA, it makes sense to consequently believe that the enclosed settlement of Phase I was identical in size to the enclosed settlements of all the later phases.

Nonetheless, I believe it is likely that Lothal expanded in size during the transition from Phase I to Phase IIA. Evidence for this expansion must be sought in the areas lying on the outer sides of the peripheral walls. Although no thorough survey of these areas has so far been conducted, Rao reports two signs of occupation; the remnants of a brick structure at a distance of 1000 feet south of the southern peripheral wall, and the scatter of pottery and bricks at a distance of 1500 feet southeast of the tank (Rao 1979: 85). If any further research takes place in Lothal, it would be very important to determine the actual size of Lothal during Phase IIA. At this point, I hypothetically suggest that during Phase I, Lothal was the size of the fortified area. By the beginning of Phase IIA, it expanded beyond the previous circumference and consequently a mud brick wall was built on top of the mud bund.

Settlement layout: The transition to Phase IIA significantly altered the layout of Lothal. First, through the construction of terraced platforms, a three-dimensional symbolism was introduced into the landscape of the fortified settlement. Second, a grid-

like layout of streets and houses was established. Third, there emerged distinct sectors within the fortified area.

Architecture: All main public structures of Lothal were built in Phase IIA. These included the so-called 'dock', 'warehouse' and the buildings of Block B on the Acropolis. Also, many new architectural elements were introduced; different types of baths and drains, corbelled roofs, headers and stretchers, buttresses, cesspools and so on.

Other changes and innovations include the introduction of new industries, the establishment of a cemetery on the outer side of the perimeter wall and the appearance of exported materials that indicate the development of long-distance trade.

In sum, the greatest advantage of Lothal's cultural sequence is that all these changes can be placed in a relatively short period of time; for regardless of whether the absolute chronology of Lothal is accurate, Phase IIA took no longer than fifty years. The emergence of all the aforementioned traits within such a short period of time unequivocally implies the presence and proper functioning of the sophisticated mechanisms of authority. Whether this authority was of local origin or the result of the expansion of Harappan culture from the west cannot be definitely answered at this point. It is my impression however that the emergence and genesis of Harappan authority at Lothal by Phase IIA was the result of both local and foreign developments; for both Harappan and local Gujarati cultural traits characterized archaeological record of Phase IIA.

Mohenjo-Daro

Reports and references: Alcock 1986, Ardeleanu-Jansen 1992, 1993, Blackman & Vidale 1992, Bondioli & Lazzari 1990, Cavagnaro Vanoni & Cucarzi 1990, Dales 1965a, b, 1982, Dales & Kenoyer 1986a, During Caspers 1992, Fischer et al 1987, Franke-Vogt 1992, 1993, 1994, Hauptmann et al 1997, Jansen 1979, 1984a, b, 1985, 1989, 1991, 1993, 1994, Jansen & Ardeleanu-Jansen 1986, Jansen et al 1997, Jansen et al 1988, Jansen & Urban 1984, 1987, Kenoyer 1985, Kondo et al 1997, Mackay 1938, Marshall 1925-1926, 1931, Heather M.-L. Miller 1994, Parpola 1992, Pracchia et al 1985, Raikes 1979, Sarcina 1978-79, 1979, Urban & Jansen 1983, Wheeler 1962, Winkelmann 1994.

Introductory remarks: Mohenjo-Daro is located in the Larkana District, Sind, Pakistan (see figure 54). The history of archaeological research at Mohenjo-Daro has been discussed in detail elsewhere (Jansen 1991, Possehl 1999). In short, there were four main archaeological projects at this site. From 1922 to 1932, Banerjee, Marshall and Mackay carried out the first and most extensive excavations. From 1934 to 1936, Moneer undertook a smaller excavation on the mound called after his name. In 1950, Wheeler took on an excavation on the Stupa Mound. In 1964-1965 Dales excavated on HR Mound. Finally, in the 1970s and 1980s, a joint German-Italian team carried out a systematic survey and recording project at Mohenjo-Daro without actual excavations.

Despite all this research, the stratigraphy and cultural history of Mohenjo-Daro are poorly known; Marshall and Mackay who exposed almost everything of what we see today on the surface at Mohenjo-Daro apparently did not pay much attention to the internal relative chronology. Marshall was the first to define a consecutive stratigraphic

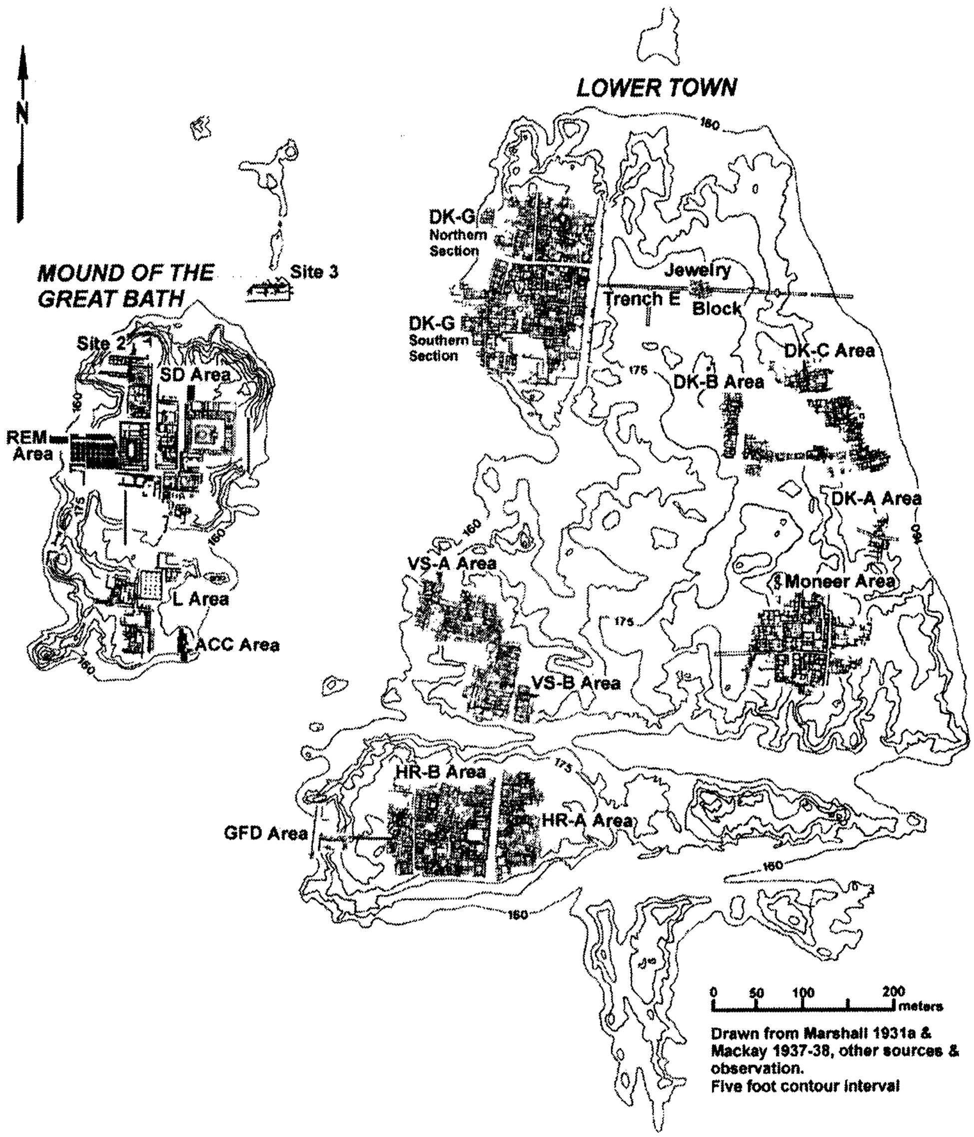


Figure 54: Mohenjo-Daro

sequence. Based on the three 40 feet deep trenches dug inside the Stupa courtyard, he defined seven strata and three periods: the late (strata 1-3), the intermediate (strata 4-6) and the early (stratum 7). Marshall clarified that this sequence was based exclusively on

the stratification of structural remains, not on the antiquities found in them (Marshall 1931: 10). Mackay generally followed Marshall's sequence, yet slightly modified the correlation of strata and periods (Mackay 1938: XIV-XVI). One must remember, that the Marshall-Mackay sequence was based on the preconceived ideas and was not meant to reflect major cultural or sociopolitical changes. Ironically, Vats who served as a supervisor at Mohenjo-Daro defined an identically similar sequence for Harappa (Vats 1940). Wheeler was very critical of Marshall's approach to chronology, yet his own excavations on the Stupa Mound at Mohenjo-Daro resulted in the formulation of three different sequences; the first, published by Wheeler (Wheeler 1962: 44), consisted of five phases; the second proposed by Alcock (Alcock 1986: 499) had eleven phases; and the third formulated on the basis of Trench ACC supervised by A. H. Dani comprised seven periods (ibid: 501). In addition, based on the pottery of Wheeler's excavation, Alcock formulated a sequence of four stages. The stratigraphy of Dales' excavation was never fully published. Yet the analysis of pottery from this excavation was placed in a temporal frame (Dales & Kenoyer 1986a: 466-486). The analyzed pottery was grouped into three phases: Phase A, Phase B and Late Phase B. The characteristics of each of these phases had cultural implications and were possibly connected with the changes in structural activities. Finally, the German-Italian project added yet another perspective to the internal chronology of Mohenjo-Daro. Based on the reconsideration of all the previous chronologies, Franke-Vogt suggested distinguishing two broad phases: the earlier and the later (Franke-Vogt 1993: 95). Jansen distinguished five periods: pre-platform, platform, urban, post-urban and Kushana Urban Period. The Urban Period is subdivided into two phases: Mature Urban and Later Urban (Jansen 1991: 163-165). As

Jansen and his colleagues did not actually excavate at Mohenjo-Daro, no absolute dates were assigned to any of these periods and phases. Each period was defined by a list of structural activities and technical innovations. Period 0 (Pre-Platform) was defined based exclusively on the analogies with the Early Harappan occupations at other sites; Mohenjo-Daro so far did not produce any evidence for human occupations before the Mature Harappan Period (Franke-Vogt 1994). Being most recent and based on a thorough review of the large amount of data, Jansen's periodization seems to be the most accurate. My further analysis of the material from Mohenjo-Daro will rely mostly on this chronology.

Fortifications: Mackay and Wheeler seemed to be very eager to find big defensive walls, gates and bastions at Mohenjo-Daro. Mackay excavated at Mohenjo-Daro for many years and did not find any fortifications; yet he still believed that the burnt-brick perimeter walls did exist at some point and were later demolished by brick-robbers (Mackay 1931: 282). The desire to find fortifications was among the main reasons that brought Mortimer Wheeler to Mohenjo-Daro. The results of the excavation on Mound AB at Harappa seemed to be a strong motivation for Wheeler to discover massive defensive walls on the 'citadel' of Mohenjo-Daro. After excavating for one season, Wheeler claimed to have spotted fortifications in the southeastern corner of the Stupa Mound (Alcock 1986). Later research at Mohenjo-Daro showed that Wheeler's conclusions were premature. No walls, bastions or any other traditional forms of defenses were present at Mohenjo-Daro. Instead, Mohenjo-Daro was found to stand on grandiose earthen platforms encircled by retaining walls and possibly a moat. Taken together, these

structures formed a unique fortification system that encompassed the entirety of the Stupa Mound and the excavated areas of the Lower City.

Banerji, Marshall and Mackay were the first to spot platforms and retaining walls under the Stupa Mound. In the final excavation report, Marshall recorded that the space between the sixth and the seventh strata which, according to his periodization, marked the transition from the early to the intermediate periods, was "occupied… by crude brick or alluvial mud heaped up artificially so as to form an immense platform over the whole of this stupa area, as well as over a big expanse of ground to the north of it…" (Marshall 1931: I.125). On the eastern and western side of the Stupa Mound, Banerjee and Marshall unearthed portions of a retaining wall (ibid.). The illustrations and plates included in Marshall's final report fully support this information (Plates XVIII, XXI).

Wheeler's deep trench on the western side of the Stupa Mound reconfirmed the conclusions of Banerjee, Marshall and Mackay. Different versions of Wheeler's section were published and discussed in Wheeler (Wheeler 1962: 44), Alcock (Alcock 1986: 499), and Jansen (Jansen 1984a: 12). Having compared these sections, Jansen suggested distinguishing at least three stages of the mud-brick bund construction; the lowest part at 45 meters a.m.s.l. or lower, the upper inner extension above 45 meters a.m.s.l., and the upper outer extension (Jansen 1984a: 12).

In sum, the structures of the Stupa Mound rest on a gigantic platform filled with alluvial sediments and encircled by a retaining wall. Jansen estimates that the amount of clay and sediments required for the construction of this platform was approximately equal to 400,000 cubic meters (Jansen 1984a: 13).

The lower city also stands on a platform. Mackay was the first to trace this platform in several locations under the DK area. For example, on one occasion Mackay noted the presence of a "very thick mud-brick platform", which did not have any objects in it and was constructed in several phases (Mackay 1938: I. 42-43). Mackay however admitted that it was very difficult to distinguish any precise structural phases in the construction of this platform and that the densely built architecture of later periods would not allow the exposure of this platform for further investigations (ibid.)

A new light on the structural history and functions of platforms and revetments in the Lower City was shed by remote sensing, surface stripping and core drilling conducted in the HR East area by the German-Italian project (Leonardi 1988). It was established that the entirety of the HR East area stood on a massive mud-brick platform encircled by a revetment wall. The platform was initially build in the beginning of the urban phase and underwent several reconstructions. Following Leonardi's presentation of data, one can distinguish at least five anthropic phases in the structural history of the platform complex; the initial construction of the platform; the construction of a mud-brick wall on the edges of the platform; the filling of the gaps between the wall and the mud-brick platform; the construction of a mud-brick structure next to the mud-brick wall; and the construction of the baked-brick revetment (Leonardi 1988: 56). Given the extent of the platform, it is not unreasonable to suggest that similar patterns of structural development characterized other parts of the Lower City.

To conclude, all the excavated areas of Mohenjo-Daro stood on artificial platforms surrounded by retaining walls and revetments. Moreover, as Jansen proposed, the city could have been surrounded by a ditch, resultant from the digging required for

the construction of the platforms (Jansen 1987: 13). Taken together, these structures formed a complex fortification system that carried at least three functions; the protection from floods, the segregations of urban areas, and the symbolic elevation of the Stupa Mound. Judging from recent investigations by the German-Italian project, the protection from floods must have played a key role in the initial stages of the construction of the platforms. Yet as Jansen pointed out, it would be too simplistic to view this fortification system only as a response to protect the city from the Indus River. The internal layout of mounds and the structural history of the investigated platform complexes show that symbolic and segregative functions played at least an equally important role in the construction of platforms, retaining walls and revetments. For example, from the point of view of the flood protection, there was no need to raise the Stupa Mound above other areas of Mohenjo-Daro or to demarcate residential areas by retaining walls and revetments. In a similar way, the renovation of the retaining wall on Mound HR East was unlikely to be due to technical reasons, provided this took place during the period of urban decay (Leonardi 1988: 64).

In sum, the elevation of the Stupa Mound is likely to have been caused by symbolic or religious reasons, i.e., the desire to emphasize the ritual or political significance of this place. The construction of retaining walls, on the other hand, could be the result of urban segregation based on professional or social affiliation of its residents. Taken as a whole, the system of platforms, retaining walls and revetments was the means of demarcations between the inner and outer worlds of Mohenjo-Daro; by acting as such, it served as one of the definitive characteristics of the urban nature of this city.

Authority: There are at least two possible scenarios for the early history of Mohenjo-Daro. According to the first scenario, Mohenjo-Daro was a founder's city. This means that it was built in a short period of time – as Jansen (Jansen 1987: 15) believes in no longer than eighty years – by specialists who were well familiar with the environment and had prior technical experience. The key elements of architectural layout and building technology, according to this scenario, were planned well in advance and the city was basically built on an empty or abandoned spot (Jansen 1994: 271-272). This scenario assumes the arrival of population and specialists from some other place. According to the second scenario, Mohenjo-Daro had an Early Harappan settlement similar to those of other Harappan sites. Around 2600-2500 BC, this settlement expanded and underwent radical changes in settlement layout, architecture and ideology. This scenario implies that it was the local population of Mohenjo-Daro which was primarily responsible for the changes and that most technological and ideological prerequisites for the emergence of Mohenjo-Daro had been acquired prior to the alleged transition from the Early to the Mature Harappan. Based on the analogy with other Harappan sites (particularly Harappa), I believe, the second scenario is more likely. The fact that an Early Harappan settlement has not been so far found at Mohenjo-Daro is not surprising (Franke-Vogt 1994). The remains of such a settlement must be well hidden under the platforms and thick layers of alluvium.

With regard to authority however, both scenarios reveal very similar patterns. The construction of platforms and the initial structural activity on top of these platforms required the presence of a strong authority regardless of whether there was or was not an Early Harappan settlement in Mohenjo-Daro. The construction of the platforms involved

the removal of clay and sediments in the amount of four million cubic meters (Jansen 1987: 13). This by itself would have required an immense consumption of labor and the permanent presence of authority on the site during the entire time of construction. In this sense, the construction of these platforms is not fundamentally different from the examples of conspicuous consumption in other early complex societies. The time immediately following the construction of the platforms (Period IIA according to Jansen and Intermediate Period III and II according to Marshall-Mackay) witnessed more structural activities. Both the chronology of Marshall-Mackay and the periodization by Jansen (Jansen 1991: 161-165) indicate that most buildings of the Stupa Mound, cylindrical fired-brick wells, main streets of the Lower City and densely built residential houses were laid out right after the construction of the platforms. Given the time constraints, scale of construction and sophistication of technology, none of this could have taken place without the permanent presence authority on the site.

Nausharo

Reports and publications: Barthelemy de Saizieu & Bouquillon 1997, Bouquillon et al 1995, Costantini 1990, Gouin 1990, 1992, Jarrige 1994a, 1997a, 2000, Jarrige 1974-1986, 1987, 1987-1988, 1989, 1990, 1993, 1994b, 1995-1996, 1997b, c, Mery 1994, Quivron 1994, 1997, 2000, Samzun 1992.

Introductory remarks: Nausharo is located on the Kachi Plain at the foot of the Bolan Pass, about 6 km south of the famous site of Mehrgarh (see figures 55, 56). Archaeological remains occupy two mounds that rise from six to nine meters above the

surrounding fields and measure ca 6 hectares in area (Jarrige 2000).[55] The excavation at Nausharo began in 1985 as part of the long-term archaeological project conducted by the French Archaeological Mission in Pakistan under the directorship of J.F. Jarrige. Several seasons of excavations resulted in the opening of large horizontal areas and the definition of a long occupational sequence. The most recent version of the sequence comprises five periods and can be summarized as follows:

Period I A, B, C	Pre-Mature Indus	3000-2500 BC
Phase ID	Pre-Mature – Mature Indus	
	Transitional	2600-2500 BC
Period II	Early Mature Indus	2500-2300 BC
Period III A, B & C	Mature Indus	2300-2100 BC
Period IV	Mature Indus –	
	Mehrgarh/Sibi Transitional	2100-1900 BC
Period V	Post Indus	

The existing radiocarbon dates are contradictory and the dating of most cultural periods is based on the comparative stratigraphy. The results of the excavation are summarized in several reports though some are confusing, for the excavators frequently revised or totally changed their previous interpretations. The following analysis is based on the data obtained prior to 1997.

Fortifications: The discovery of fortifications at Nausharo has a long and complicated history. Excavation reports show how upon the uncovering of the new data

[55] Possehl mentions the size of 1.8 hectares (1999: 633)

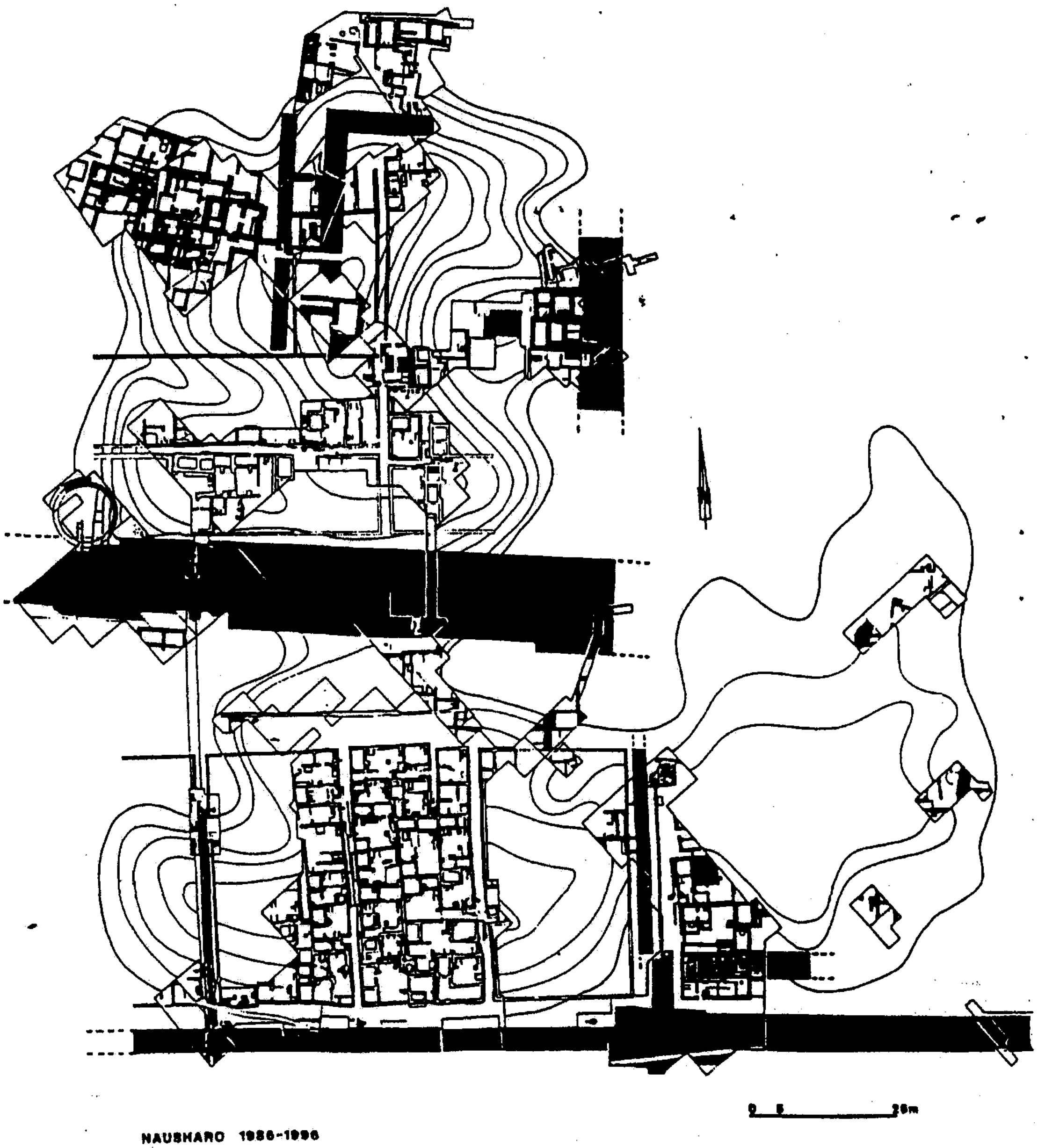


Figure 55: Nausharo (after Jarrige 1995-1996)

Jarrige and his team revised and changed their previous interpretations. According to the most recent data, during the mature Harappan period Nausharo had a massive and elaborate system of fortifications.

In the season of 1988-89 a fragment of a massive structure consisting of a drain, a wall and a mass of mud brick was discovered on the southern side of the northern mound (see figure 56). Jarrige suggested that it was a water reservoir similar to the one excavated at Lothal (Jarrige 1989: 48). The discoveries of the next season however altered this interpretation; for besides the further investigation of the main perimeter wall, the excavation revealed a network of perpendicular walls and a large semi-circular structure. The main wall was found to be built in Period ID and consequently renovated in periods II and III (Jarrige 1990: 222). The earliest part of the wall was reportedly 8.5 meters wide at it highest point (Jarrige 1990: 227-228). In Period II this wall was widened to 11 meters (Jarrige 2000: 241). The perpendicular walls also dated to Period ID were excavated along the length of 10 meters and were found to measure over 5 meters in width. It was argued that lengthwise and widthwise these walls extended beneath the entirety of the northern mound (Jarrige 1990: 230). The semicircular structure located in the southwestern corner of the mound right next to the wall was dated to Period II and was found to measure 11.5 meters in diameter (Jarrige 1990: 231). Regarding the function of perpendicular walls, Jarrige suggested to view them as a "compartmented platform" that lay underneath the northern mound. Overall however Jarrige admitted that the purpose of all these imposing and labor-consuming structures was puzzling (Jarrige 1990: 230). In the same season, Jarrige discovered the remains of a massive mud-brick wall under the cultivated fields on the southern side of the southern

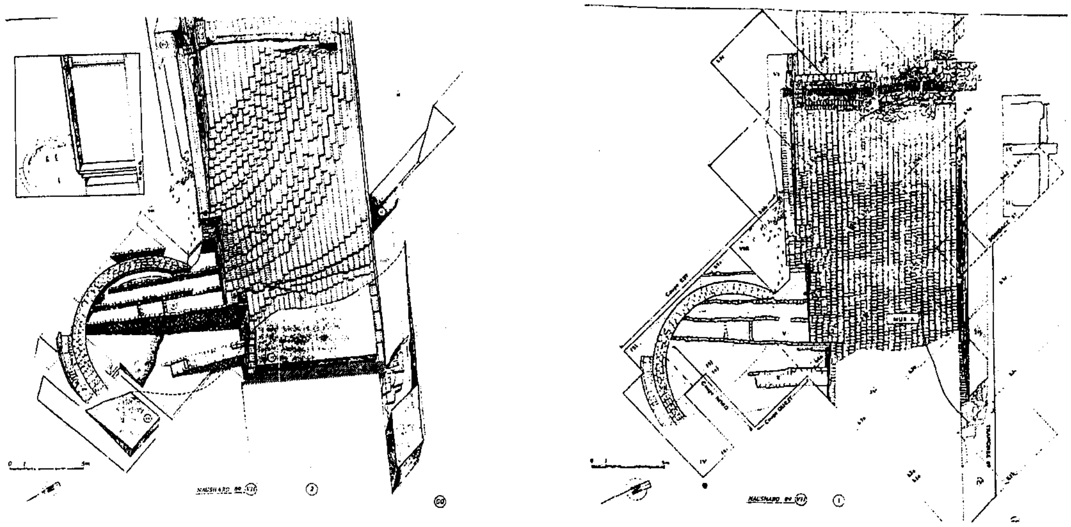


Figure 56: Dividing Wall and a Circular Structure at Nausharo (after Jarrige 1990)

mound. Standing on a mud-brick platform, this wall reached 3.8 meters in extant height and 3-6 meters in basal width. Based on ceramics, its construction was dated to Period II (Jarrige 2000: 240, Jarrige 1990: 238-239). During the later seasons it was established that the wall was pierced by a large gateway leading to the main thoroughfare of the southern mound.

Taken together these data allows us to make some preliminary generalizations. As far as structural history is concerned, the northern mound of Nausharo was fortified in Period ID, i.e. shortly prior to the beginning of the Mature Indus phase at Nausharo. Massive compartmented platforms were built underneath the Northern Mound around the same time. Period II, i.e. the beginning of the Mature Indus phase, was marked by the

strengthening of the existing fortifications on the Northern Mound and the construction of the new fortifications around the Southern Mound.

As far as the meaning of the fortifications is concerned the question is much more complicated. After having to reverse several of their earlier interpretations, the excavators seem to avoid discussing the functions and meanings of Nausharo fortifications. I nevertheless believe that the currently available data provides us with a wealth of material for constructing a reasonable and convincing explanation. Looking at the top plan of Nausharo drawn by G. Quivron (see figure 55), one is struck by the magnitude of the wall and the platform dividing the northern and southern mounds. This wall is noticeably different in scale, strength and magnitude from the two other excavated walls; the eastern wall of the northern mound and the southern wall of the southern mound. Moreover, the wall does not seem to have a gateway, opening or passage that would connect the Southern and Northern sectors. This leads us to two interesting observations. First, the wall and the platform dividing Nausharo into two sectors were much more powerful and visually imposing than the outer fortifications of either sector. Second, communication between the two sectors was complicated and possibly restricted. Given these, it seems reasonable to suggest that *the dividing wall performed a symbolic function*, i.e., segregated the urban space based on political, social, professional, religious or ethnic differences. Moreover, the difference(s) that caused this segregation must have been significant enough to be expressed in the grandiose scale of the dividing wall and the lack of direct communication between the sectors. In the case of social, political or ethnic distinctions this would imply hierarchical rather than heterarchical relations between the groups residing in different sectors; the presence of monumental architecture

in the northern sector also supports this view. In the case of ideological differences, this would imply the symbolization of space by means of walls, platforms and the restriction of access.

The symbolism of the Nausharo fortifications can be also envisioned through the general assessment of the amount, layout and functionality of walls. The fact of the matter is that besides free-standing perimeter walls Nausharo was laid out on a rigid rectangular grid, oriented in strict accordance with the cardinal points. Several blocks of the Southern sector have been fully exposed and one can see that *the mud-brick wall was a crucial element in conveying rectangular linearity as the main principal of settlement layout*; long solid walls that surrounded each block served both as the backside for the houses and as the marker of access and border for their respective sectors. Judging from the number of entrances to each block, access was restricted. It is difficult to imagine that such a rigid layout was created exclusively in response to practical needs. Esthetic and symbolic considerations must have played a very important role as well. In fact, I believe that the symbolic meaning of the wall as the divider of space based on sociopolitical, religious, professional or ethnic differences was the key principle in the construction of internal fortifications and the block walls of Nausharo. Other considerations such as military defense or protection from floods seem to have played a secondary (if any) role.

Authority: When Jarrige and his team began to excavate at Nausharo, they thought that they were dealing with a large Indus village; in the first report published in Pakistan Archaeology, Jarrige characterized Nausharo as "a sizable rural center" that had neither large scale craft activities nor a complex sanitary system (Jarrige 1974-1986: 119). Yet, after a few seasons of extensive excavations, this view totally changed; in one of the

recent reports, Nausharo of Periods II and III was portrayed as "a true city with a large surrounding wall and an important drain network in fired bricks" (Jarrige 1995-1996: 4). Judging from the currently available data, the latter view is much more accurate. It appears that by Period II, Nausharo had become an important regional center distinguished by a rigid social structure and strong authority. All the major Period II structural innovations – fortifications, platforms and the monumental building on the Northern mound – were extremely labor-intensive and surely required the control and organization of labor, i.e., the presence of authority. In a similar way, the implementation of grid planning, the maintenance of urban segregation and the renovation of public buildings required the presence of authority. The point of potential controversy is not the presence of authority per se, but the temporal frame of its emergence. Did it appear in the beginning of Period II or during the later phases of Period I? Did it gradually emerge from the local sociopolitical milieu or was it the result of population movement? To answer these questions, one must reassess the archaeological record of the sub-periods immediately preceding the beginning of Period II at Nausharo. In one of the conferences of the European association of South Asian archaeologists, Jarrige delivered a paper in which he discussed the significance of Period ID, the one that directly precedes Period II. According to Jarrige, Period ID marked a brief yet drastic transition from the Pre-Mature Harappan to Mature Harappan culture at Nausharo. Moreover, Jarrige argued that Period ID signified a general transitional stage between "the late Quetta/Sadaat III, Mehrgarh VIIC tradition and the Harappan civilization in its early stage" (Jarrige 1993: 162).

Leaving aside broad generalizations, one must admit that the least that the archaeological record of Period ID can elucidate is the temporal frame of the emergence

of authority at Nausharo. Reviewing the traits of Period ID, one realizes that this short intermediate period displayed the signs of conspicuous consumption of labor for the first time in the cultural history of Nausharo. Besides the construction of the first fortifications, this period was marked by the erection of the first massive architectural complex on the Northern Mound. Terraces, platforms, regularly planned houses and some basic elements of sanitation were built during Period ID. The principles of urban segregation were also likely to be evolving during this period. As recently noted, the size of Nausharo during period ID, II and III may have been much larger than thought before. Judging from the discovery of the Period II perimeter wall – with structural remains on both of its sides – deep under the alluvium of agricultural fields, the actual size of the site might have reached more than six hectares (Jarrige 2000). Moreover, the original interpretation according to which Period II saw the abandonment of the Northern Mound and the settling of the Southern Mound is no longer valid; recent excavations have shown that both the Northern and Southern mounds were flourishing in Period II. Given all these, it makes sense to view the wall of Period ID as the marker of space between the different parts of the settlement. This in turn implies that Period ID saw the initial stages of social segregation and the shaping of authority. Thus it appears that authority at Nausharo had evolved prior to Period II and its genesis was contemporaneous with the construction of fortifications.

As far as the second question is concerned – whether authority evolved from the local sociopolitical milieu or was the result of population movement – is more difficult to answer. Jarrige seems to believe that Period ID being truly transitional displayed the beginnings of the Harappan cultural elements from the local cultural traditions. One must

not forget however that Period ID ended in massive burning and all the Period II structures of the Northern Sector were built anew. It thus is not impossible that the population movement was involved in the culture change at Nausharo. Yet it is clear that the complexity of Period II at Nausharo was not brought from outside. Even if the external impulses played some role, Nausharo was fully ready for further transformations.

Surkotada

Reports and references: IAR 1970-71: 13-15; 1971-72: 13-21; Bisht 1989a, J. P. Joshi 1972, 1974, 1990.

Introductory remarks: Surkotada is located in the District Kutch of Gujarat, possibly on the bank of a lost river (J. P. Joshi 1990: 14-15). Joshi discovered it in 1964 on a survey of Northern Kutch, and excavated it in 1970-72 on behalf of the ASI. Surkotada is quite small. The mound on which it lies occupies an area of 2 hectares (see figure 57). The size of the fortified site is even smaller, measuring 120 by 55 m or 0.66 ha or 120 (see figure 59) (J. P. Joshi 1990: 49, 56). Considering that only two excavation seasons were conducted, the scale of horizontal exposure is quite impressive. The main trench laid on the southern side of the mound measured 140 by 45 m, an area roughly equal to the entire fortified site. Several additional trenches were dug on the northern side of the mound as well in the cemetery lying to the northwest of the fortified area (J. P. Joshi 1990: 15). Based on these excavations, a sequence of three cultural periods was defined (see figure 58) (J. P. Joshi 1990: 59-66):

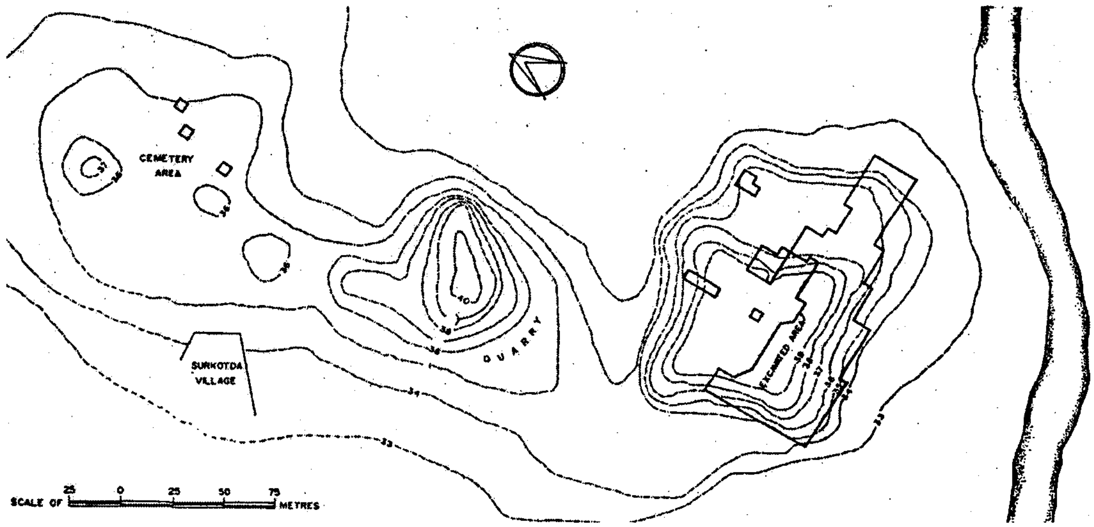


Figure 57: Contour Map of Surkotada (aftetr Joshi 1990)

Period IA	ca 2300 – 1970/40 BC
Period IB	ca 1940 – 1790 BC
Period IC	ca. 1790 – 1660 BC

The criteria for the definition of the periods are not very clear. Transitions between the periods are smooth and not well defined. This possibly explains why Joshi named the periods IA, IB and IC instead of I, II, and III. Apparently, he wanted to emphasize the cultural unity of the sequence.

The results of the excavation at Surkotada are well published.

Fortifications: Owing to extensive horizontal excavations, the plan and structural history of fortifications at Surkotada are well known. From the beginning of occupation, Surkotada was encircled by a massive rampart, which also divided the site into two parts:

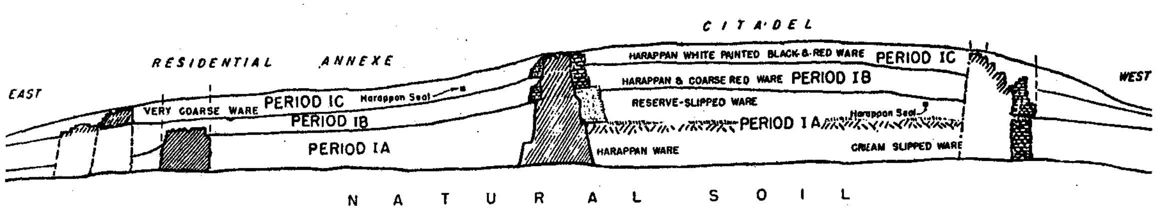


Figure 58: Generic Section of Surkotada (after Joshi 1990)

the eastern and western[56]. The inner core of the rampart was made of mud bricks and mud lumps. On the outer and inner sides, it had a veneer of dressed stones. The layout of the rampart does not seem to have changed significantly within time. It nevertheless underwent several renovations, was numerously revetted on both side, and was rebuilt *de novo* in the beginning of Period IC. As far as the dimensions of the rampart are concerned, the western section was fortified slightly heavier during periods IA and IB. The basal width of the rampart in the western section during these periods was on average 6-7 meters, whereas the width of the rampart in the eastern section was 3.5 to 5 meters. Nonetheless, by period IC (which the excavators seem to view as the efflorescence of the Harappan culture at Surkotada), the basal width of the rampart decreased to an average of 4 m. The height of the rampart is much more difficult to determine. Joshi maintains that initially the rampart was only 1 m high and was raised

[56] Following the terminology of the early excavators of Harappa and Mohenjo-Daro, Joshi calls these parts the "Citadel' and the 'Lower Town'. To avoid the interpretative character contained in these terms, I shall refer to them as the eastern and western section.

during the later innovations (J. P. Joshi 1990: 33). It is not clear however how Joshi arrived at this conclusion.

In several places, the rampart was pierced by gates and entrances. The most imposing gate was detected in the middle of the southern rampart. It occupied an area of 190 sq m and had ramps, parapet walls and stairs (J. P. Joshi 1990: 51-52). The structural history of this gate however is not very clear. The excavator believes that in Period IA it was a simple open entrance 1.8 m wide (J. P. Joshi 1990: 43). Hence, the first gate complex was constructed either in Period IB or in Period IC (J. P. Joshi 1990: 47, 51-52). Besides this gate complex, there were several simple entrances located both in western and eastern sections of the site. These entrances did not reveal any traces of gates or additional structures throughout all the three cultural periods. Bastions detected at the corners of the rampart were built in Period IC. Dressed stones and burnt bricks were used in their construction. The bastions underwent several phases of renovations all within Period IC (J. P. Joshi 1990: 51, 57). Given the size of the site, the two excavated bastions of the western section were quite big; at the final phase, the first one occupied an area of 110.25 sq m and the second one occupied an area of 109.8 sq m (J. P. Joshi 1990: 51).

Thus, pierced by gates and topped by bastions, the rampart must have made Surkotada look like an imposing little fort. That such a small settlement was so heavily fortified and divided into two sections raises a number of intriguing questions with regard to the function of fortifications at Surkotada. Joshi believes that at least during Period IC Surkotada was fortified for the purpose of military defense (J. P. Joshi 1990: 49). In my view, this explanation is a bit simplistic. Given the currently available data, the meaning

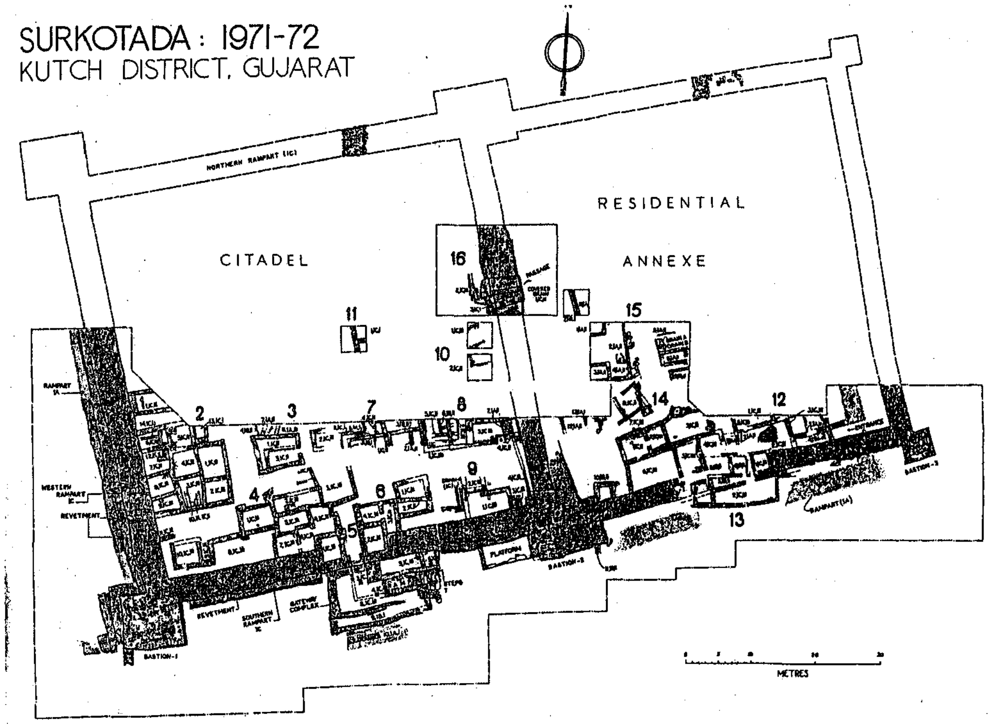


Figure 59: The Fort of Surkotada (after Joshi 1990)

of fortifications at Surkotada appears to be much more complex. In this respect, the following five points deserve particular attention:

1. If in Period IA, the rampart was only 1 meter high, it is very unlikely that it performed a military function. One can easily jump or even step over such a rampart.

2. If the rampart carried a purely defensive function, one would expect it to increase rather than decrease in width. Nonetheless, the width of the rampart in the western section (the alleged 'Citadel') significantly decreased from Period IA to Period IC.

3. From a military perspective there was no need to divide the settlement into equal parts by means of a massive wall. The division of the sections must have carried a sociopolitical or religious function.

4. It is likely that the actual size of Surkotada exceeded the size of the settlement encircled by fortifications. On one occasion Joshi notes: "At the extreme southwestern corner of the revetted bastion, there is a projecting structure having one course of stones in an area of 3.40 by 1.60 m. These suggest that in Period IC there was some habitational activity outside the rampart" (J. P. Joshi 1990: 51). Unfortunately, the excavators did not investigate this suggestion sufficiently. Nonetheless, the fortified area constituted only a third of the entire mound. With the cemetery on the northern side of the mound and the fortified area on the southern side, it is highly unlikely that the central part of the mound and other adjacent areas were unpopulated. Given this, it is possible that the fortified area was a heavily segregated part of the larger settlement, rather than a self-sufficient site.

5. During all the three periods of the occupational sequence, there were openings in the walls of both sections that did not have gates, ramps, stairs or any other protections. In a similar way, in later periods there was an open passage connecting eastern and western sections.

Either directly or indirectly, each of these traits indicates that there was much more to the meaning of the fortification system at Surkotada than a military defense. Military defense might have played a significant role during Period IC, when the rampart was strengthened by bastions and the new gate complex was built on the southern side of the western section. During the initial phases however an important consideration must have been the necessity to segregate the site due to sociopolitical or religious factors.

Judging from the aforementioned traits, these segregative factors continued to play an important role in the later cultural phases as well.

Authority: Evidence for authority is present at Surkotada throughout all three cultural periods. In other words, Surkotada appears to be a founder's settlement, established by the Harappans on virgin soil in the second half of the second millennium BC. The three following lines of argument show how the settlement layout, architecture and material culture indicate the presence of authority in Surkotada.

Layout: As mentioned above, Surkotada was divided in two or possibly three distinct sections. The only noticeable difference between the two sections however is the strength and magnitude of fortifications. For example, the bastions of the western sections were significantly larger than the bastions of the eastern section; ca 110 sq m versus ca 10-11 sq m. And the gate complex in the south of the western section was much more imposing than the entrances in the eastern section. What is more important however is that these differences characterized mainly the final occupational Period IC. In the two earlier periods, fortifications, layout, architecture and material culture of the two sections were very similar. Moreover, even in Period IC, domestic architecture, internal layout and material culture of the two sections were also similar.

Massive architectural projects: There is evidence for three massive construction projects that took place at Surkotada:

1. The construction of a mud platform underneath the entirety of the fortified site in Period IA;

2. The construction of the rampart and the dividing wall in Period IA;

3. The construction of the new rampart, massive bastions and the gate complex in the beginning of Period IC.

Each of these projects must have required a significant consumption of labor.

Material culture: As in many other Harappan sites all periods at Surkotada had large numbers of characteristically Harappan artifacts. Among those that are indicative of authority are seals, inscribed objects (J. P. Joshi 1990: 359) and weights (J. P. Joshi 1990: 337). Except for the pottery however, temporal variations of artifacts are not well defined. With regard to the pottery, Joshi argues that in Period IA the percentage of "Harappan" pottery was significantly higher than in Periods IB and IC (J. P. Joshi 1990: 18).

Taken together, these traits lead to contradicting statements. On one hand, settlement layout and construction projects provide ample evidence for authority: neither division in sections nor the construction of bastions and gates would have been possible without the control and guidance of authority. On the other hand, material culture, domestic architecture and burials display a high degree of homogeneity, and do not provide any evidence for the presence of a ruler or a ruling group. Joshi apparently believes that the social system at Surkotada was hierarchical. By using highly interpretative terminology – the citadel and the residential annex – Joshi unwittingly implies that the ruler and the ruling group lived in the citadel whereas the commoners lived in the residential annex. It is needless to explain that such a view is simplistic. Moreover it is in clear contrast with the available data. The system that resulted in the division of space, yet maintained heterogeneous material culture must have operated on heterarchical rather than hierarchical principles of social organization. Given this it seems

reasonable to suggest that during Period IA and likely during Period IB Surkotada was characterized by a heterarchical sociopolitical system. In these two periods, even the communication between the two sections was easy; it was carried out by means of a wide passage that was laid over the dividing wall. By the beginning of Period IC, however, the heterarchical system must have attained hierarchical features. Archaeologically, this became expressed in the strengthening of the western section, the construction of the gate-complex, and the replacement of the interconnecting ramp with a passage inside the wall. Most importantly however, heterarchical social system does not exclude the presence of authority. In the case of Surkotada, massive structural projects are the best evidence for its existence.

Sutkagen-Dor

Reports and references: Dales 1962a, b, 1964, 1992a, Mockler 1877, Stein 1931: 36-60, 135-157.

Introductory remarks: Sutkagen-Dor is located in the Dasht Valley of Makran, Pakistan, 35 km east of the Iranian border. It was discovered and briefly explored by Major E. Mockler in 1875. Stein visited and excavated Sutkagen-Dor in 1928. G. Dales conducted a small-scale excavation at this site while surveying the Makran Coast in 1960. Dales' project lasted for only two weeks and, in Dales' own words, given the size of the site it was "ridiculously small". Nonetheless, it provided some important information and raised a number of interesting questions (Dales & Lipo 1992: 58). Although Dales' main interest at that time was to investigate coastal contacts between the Indus civilization and the Near East (Dales & Lipo 1992: 135), the results of Dales' excavation at Sutkagen-Dor

were far-reaching: they raised a number of important questions with regard to Harappan expansionism and the nature of urbanism in the Harappan civilization in general.

The site of Sutkagen-Dor occupies an area of at least 4.5 hectares (Possehl 2002c: 80). One must note that the actual size of the site has never been established and it is possible that the citadel measuring 117 by 103.3 m, ca 1.2 hectares, constituted only a small portion of the site (see figure 60, 61). Since the excavations were very brief, the cultural sequence could not be properly defined (see figure 62). Nonetheless, the L-shaped trench A-A1 excavated under the supervision of R. Mughal next to the interior face of the western citadel wall revealed a stratigraphic sequence that allowed Dales to define what he called a sequence of human events (Dales 1992a). This sequence consisted of seven phases and for the purpose of our argument can be summarized as follows:

Phase 1	The arrival of the Harappans
Phase 2	The construction of the citadel
Phases 3-6	Various structural modifications
Phase 7	Post-Harappan occupation

It is in the context of this sequence that we can discuss the construction of fortifications and the emergence of authority.

Fortifications: The system of fortifications is the most distinctive feature of the archaeological remains of Sutkagen-Dor. Many of its elements are still well preserved and greet the visitor with their grandeur. Mockler (1877) and Stein (1931: 36-60) recorded the measurements and made the first maps of the massive wall surrounding the

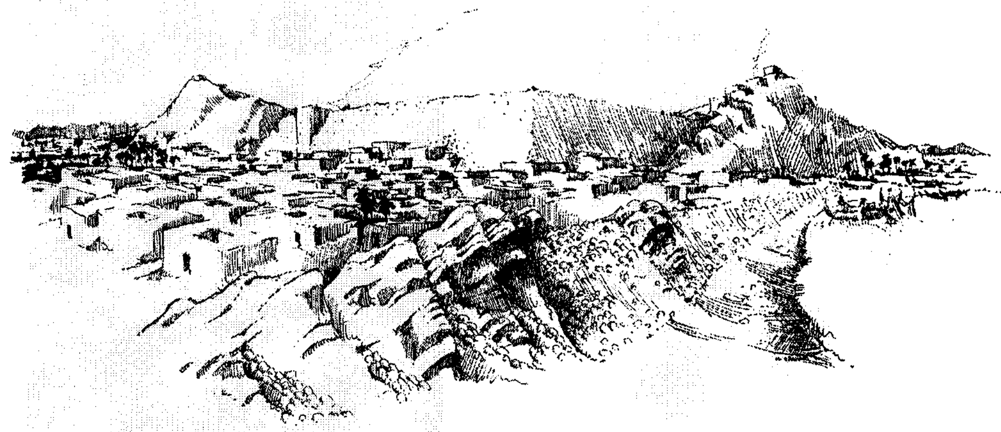


Figure 60: Sutkagen-Dor (after Dales and Lipo 1992)

citadel area. It was not until Dales and his team spent two weeks at the site however that the first elements of structural history and stratigraphy were established.

For the understanding of structural history and relative chronology, Dales and his team made two important discoveries. First, they found out that the citadel wall stood on natural soil: the supervisor of Trench A reached the bottom of the inner face of the western citadel wall and discovered that there was no occupational deposits underneath the wall (Dales & Lipo 1992: 58). Second, they determined that all the structural phases in the construction of the wall were stratigraphically associated with Mature Harappan deposits. What this meant for the broader understanding of the history of Sutkagen-Dor

was that the citadel was constructed by the Harappan newcomers immediately after their arrival on the site, and that these newcomers had a clear plan in mind prior to settling on the new territory. In this context, the function of the fortification system at Sutkagen-Dor was most likely focused on military defense. Moreover, other available evidence speaks in favor of military function as well: First, the dimensions and strength of the citadel wall were truly immense. Made of roughly shaped stones, the citadel wall at Sutkagen-Dor was different from the typical mud brick walls surrounding other Harappan settlements. The basal width of the eastern wall was estimated at ca 7.5 meters. The extant height of the western wall was 3.3 m (Dales & Lipo 1992: 147). Moreover, the wall was strengthened by towers and had a massive narrow gate in the southwestern corner. Second, some mud-bricks structures being incorporated in the fortification complex were very likely to perform a military function. Trench A1 for example revealed a long mud brick platform built on a stone foundation against the inner face of the western citadel wall. This platform was 2.3 meters wide and 3.35 meters high. Dales justly suggested that these were the best dimensions to allow guards to walk unnoticed behind the western wall (Dales & Lipo 1992: 46, 47, 137, 147). Finally, the segregative function typical of fortification systems on many other Harappan sites does not seem to have played an important role in the construction of the citadel; unlike some other Harappan settlements, Sutkagen-Dor was not divided into distinct sections and its fortification system was too imposing to perform a sociopolitical function.

Authority: An intriguing feature of the material culture at Sutkagen-Dor is the lack of certain classes of artifacts typically found on Mature Harappan sites. Among others,

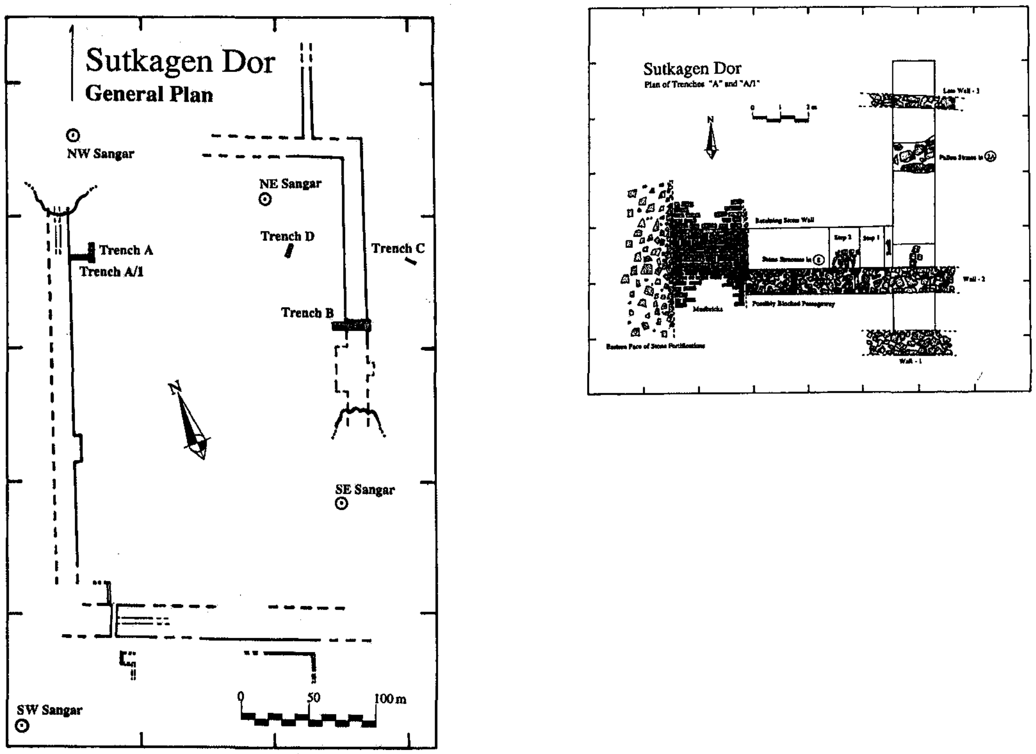


Figure 61: Sutkagen-Dor, Plans of Excavations (after Dales and Lipo 1992)

these artifacts include seals, figurines, beads, and faience objects. Interestingly, a similar situation is observed at Sotka-Koh, another Harappan site in the Makran. Dales does not provide an explanation for this intriguing phenomenon except for noting that this "may reflect the difference in activities and function between these coastal sites and those more closely associated with central Indus Valley sites" (Dales & Lipo 1992).

Considering recent studies on the relationship between crafts and sociopolitical structure in the Harappan civilization, I believe this puzzling phenomenon is reflective of a unique sociopolitical organization at Sutkagen-Dor. Craft specialization and

sociopolitical organization do not have universal and simplistic equations. The equafinality of material culture often makes the reconstruction of sociopolitical structures almost impossible. In the context of the Harappan civilization, the complexity of the interrelationship between crafts and social structures has been justly advocated by several scholars. Nonetheless, as Kenoyer and a few others have shown, there are ways to use technology, crafts and even specific artifacts in the analysis of social, economic and political structures. Bhan et al, for example, have discussed in detail the significance of major Harappan crafts with an emphasis on specific artifacts, i.e. lithics, semi-precious stones, steatite, faience, shell, terracotta, and so forth. For example, bead ornaments, in their view, were “a critical feature of all Harappan settlements”; steatite was “more than just a versatile raw material and undoubtedly had significant socio-ritual implications”; and shell working was the industry that provided the best evidence for urban segregation (Bhan et al 1994: 145-147). Furthermore, based on spatial distribution of artifacts, craft standardization, access to resources and other criteria, Kenoyer has argued that the social organization of Harappan cities displays “some form of socioeconomic ranking”. To Kenoyer, in other words, the patterns of craft production and distribution are indicative of the patterns of sociopolitical organization (Kenoyer 1989b: 189).

Now, if one generally agrees with the proponents of studying social organization through craft and technology, one must also agree that the artifacts listed by Dales as missing are, in one way or another, indicative of sociopolitical structures and mechanisms. Seals for example are reflective of social structures in at least four ways: through the acquisition of resources required for their production, through the technology of their production, through the texts inscribed in the Indus script, and through the

iconography of inscribed images. In spite of all the diversity of possible interpretations to which each of these four paths may lead, one thing is nevertheless clear; the presence of seals in the archaeological record is indicative of complex sociocultural structures. Bead ornaments, in a similar way, being the result of sophisticated technology and "a critical feature of all Harappan settlements" are indicative of esthetic, social, technological and possibly ethnic distinctions. Terracotta figurines requiring local raw material and simple technologies (Bhan et al 1994: 143, Kenoyer 1989b, 1992) are likely to be indicative of local sociocultural and religious norms. Finally, faience objects can be seen as an indicator of complex socioeconomic mechanisms.

Now turning the argument upside down, we must ask whether the lack of these artifacts and technologies indicates the absence of sociopolitical structures and mechanisms for which they stand. I believe that in the case of Sutkagen-Dor we can disregard the equafinality and answer this question positively. The reason for this lies in the diversity of archaeological evidence that makes Sutkagen-Dor look different from other Harappan sites. The location, layout, fortifications and cultural history of Sutkagen-Dor display many unique features. Founded far from the core area of Harappan culture, Sutkagen-Dor was likely to be located in a culturally alien environment. The layout of Sutkagen-Dor, consisting of a citadel and the outer town does not show a rigid division into sectors like some other Harappan sites. Massive stonewalls strengthened by towers and connected with mud-brick platforms form a formidable system of military defense.

Finally, the stratigraphic sequence displays the absence of pre-Harappan and brevity of pre-defense occupations.

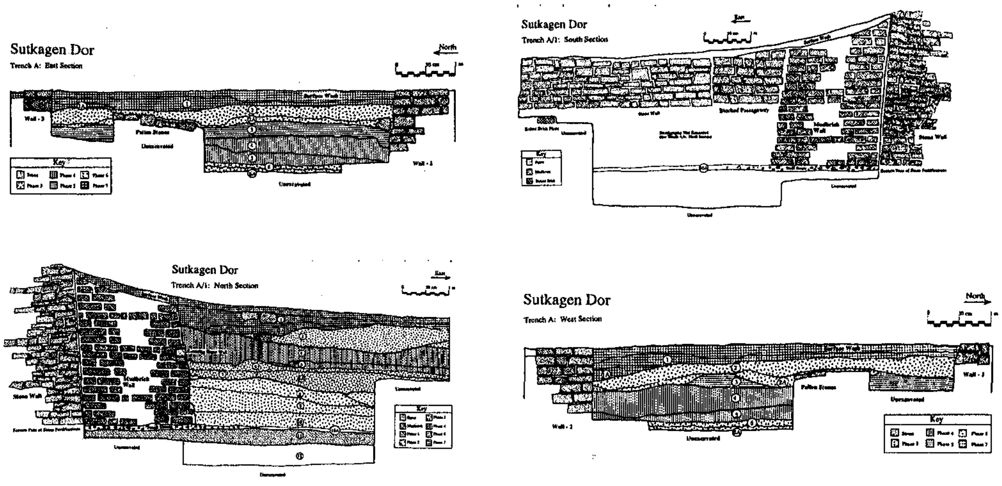


Figure 62: Suktagen-Dor Sections (after Dales and Lipo 1992)

Against this background, I believe, it is not unreasonable to propose the following explanation. Sutkagen-Dor was founded by a group of Harappan colonists. The sociocultural order of their community was relatively homogeneous; for it neither required rigid residential sectioning nor produced the usual products of Harappan social order, i.e. writing, seals and bead ornaments. The members of this community were united and led by a clear goal; resources, political control, exploration of new territories, etc. ... They had a clear plan in mind before the construction of the citadel. Despite their social homogeneity however they had enough power and authority to organize and supervise labor for the construction of a massive citadel. To maintain the citadel and its defense, they must have had among them a group of at least part-time military specialists.

Thus as far as authority is concerned, one must conclude that some form of authority had been present on the site prior to the construction of the citadel. Moreover,

one may suggest that during the initial stages of occupation this authority was responsible for at least three tasks; the construction and maintenance of the citadel, the defense of the site, and the performance of the task/s that led the colonists to this remote area. To test this hypothesis, one would certainly need to conduct further excavations both inside and outside of the citadel. In the drawing of Sutkagen-Dor attached to the lively report of Makran survey, the outer town is depicted as densely populated area. Who lived there: the Harappan colonists, local populations or maybe a mix of both? Was the settlement established with the advent of the Harappans or had existed there before? What was the interaction between various ethnic and social groups? All these question show that Sutkagen-Dor is a truly fascinating borderline settlement. What would further develop the proposed theory is the discovery of culturally diverse material remains outside the citadel area. Until then, we should consider the proposed explanation as hypothetical, yet plausible.

Conclusion: The Idea of the Harappan City

The reassessment of the data on fortifications and authority from twelve Harappan sites has brought interesting results. Taken together, these results reveal regularities that lead to a better understanding of the idea of the Harappan city. As in the conclusion of the previous chapter, I will summarize the results of this chapter under three subheadings: the function of fortifications, the nature of authority, and the thought expressed in the Harappan city.

The function of fortifications: To begin with, military considerations have a clear role in the construction of fortifications only in one case, i.e. at Sutkagen-Dor. The fort at

Sutkagen-Dor must have been built immediately after the arrival of the Harappans. Compared to the area it occupied, the dimensions of its walls are immense. Moreover, several structural elements are directly indicative of the fort's military function (see above). Besides Sutkagen-Dor, military considerations may have played some role in the construction of fortifications at Dholavira and Banawali; the fortification systems of these two sites appear militarily effective. On the rest of the reviewed sites, fortifications were less likely to perform any military function. Moreover, as I have argued above, some of the reviewed fortification systems were inefficient from the military point of view.

Ecological factors may have played a role in the construction of fortifications on the sites built in the immediate proximity to the water. Indeed, many Harappan sites are located next to the rivers: Banawali and Kalibangan on the Ghaggar-Hakra, Chanhu-Daro and Mohenjo-Daro on the Indus, Harappa on the Ravi, Lothal between the Bhogawo and Sabarmati, and Surkotada on a nameless river. On some of these sites perimeter walls reveal patterns of erosion caused by water. On the whole however, ecological factors seem to have played a secondary role; for as I have argued above Banawali, Dholavira, Kalibangan, Harappa, Lothal, Mohenjo-Daro, Nausharo, and Surkotada, i.e., eight of the eleven fortified sites discussed in this chapter, reveal traits indicative of ideational and symbolic meanings of their fortification systems. The following is a brief summary of my argument (also see table 10 and figures 63).

At Banawali, the first fortification wall is vulnerable to military attacks, the moat is built only on one side of the site, the site is divided into two fortified sectors, there are very few platforms, occupational deposits are likely to extend outside the city walls; and

Table 10: Major Modifications in the Harappan Fortifications

Banawali	Mud-brick wall	Division in sectors	Gate, moat, berm, channel
Chanhu-Daro	Mud-brick wall (?) and platforms	Sequence poorly defined	
Dholavira	Stone wall	A complex system of stone walls, gates, passages. Etc	
Harappa	Mud-brick walls and platforms on AB and E	Walls and platforms on other mounds	
Kalibangan	Mud-brick wall	The new system of walls, bastions and platforms; division in sectors	
Kot Diji	Stone wall	Mud-brick wall on stone foundations; bastions	Degeneration of the wall
Lothal	Mud-bund	Mud brick wall, mud brick platforms and division in sectors	
Mohenjo-Daro	Mud-brick walls (?) and platforms	Sequence is not well differentiated	
Nausharo	Mud-brick wall and platforms	Division in sectors	
Surkotada	Mid-brick wall with bastions and gates; division in sectors	Rebuilding of the entire fortification system	
Sutkagen-Dor	Stone wall with towers and a gate	Modifications; platform on the inner face of the western wall	

the perimeter walls are smoothly incorporated in the natural landscape. At Dholavira, fortifications of the castle are strikingly more monumental than the outer walls, the site is

divided into four fortified sectors, the design of the walls and gates incorporates non-utilitarian and esthetic elements, and the layout of the free standing walls creates several empty spaces and open areas. At Harappa, fortifications divide the site into four sectors, access to certain parts of the site is restricted, and the communication between some parts of the site is complicated. At Kalibangan, the earliest fortification wall is vulnerable, the site is divided into three sectors, fortifications significantly vary in scale, and some platforms have no structures on top of them. In Lothal, access to the site is restricted, the site is divided into two fortified sectors, many buildings stand on platforms of different heights, and several platforms have no structures on top of them. In Mohenjo-Daro, platforms and elevations are used for ideological purposes, and the site is divided into distinct and possibly fortified sectors. In Nausharo, the site is divided into two fortified sectors, the wall dividing the northern and southern sectors is significantly bigger than the outer walls, and the southern sector is divided into distinct rectangular blocks. In Surkotada, the first rampart is vulnerable, its width decreases rather than increases in time, there are several openings in the walls, the fortifications of the western sector are significantly more monumental than fortification of the eastern sector, and the site is divided into two fortified sectors.

Taken together, these traits reveal recurring patterns that can be grouped and discussed under five themes: elevation, scale, access, segregation, and accentuation of space.

Elevation: The landscapes of the Harappan sites are uneven. The elevation of certain sectors and structures by means of mud and mud-brick platforms is a key element of planning. In this chapter, I have treated platforms as part of fortification complexes,

for the platforms are often directly connected to perimeter walls. In terms of their function, platforms seem to be part of fortification complexes as well; for there are at least three indications of their ideational use. First, platforms can be of different heights within the same site or even within the same area of the site (Mohenjo-Daro, Lothal, Nausharo). Second, there are platforms that have no structures on top (Kalibangan, Lothal). Third, platforms do not necessarily cover the whole sites or even the whole areas of the site. Banawali has just a few occasional platforms, whereas in Kalibangan platforms cover only the southern part of the western sector.

Scale: Fortifications of many Harappan sites are monumental and their construction is labor consuming. Monumentality however characterizes mainly platforms (Mohenjo-Daro, Harappa, Lothal, Kalibangan, etc) and internal fortifications (the castle of Dholavira, the dividing wall at Nausharo, the southern part of the western sector at Kalibangan). Most external fortifications (the outer walls) are not monumental.

Access: There are numerous indications that the construction or non-construction of gates on Harappan sites has ideational causes. The Southwest Gate on Mound ET at Harappa is blocked at some point. Some sites have very few entrances (Lothal), whereas other sites have several wide openings (Surkotada). Some gates are monumental (Northern Gate at Dholavira), whereas other gates are very simple and barely protected. Several gates have very narrow passages (Dholavira, Harappa).

Segregation: One of the most obvious features of the Harappan fortification systems is segregation. Most of the reviewed fortified sites are divided into two or more sectors encircled by walls. Banawali has two fortified sectors. Dholavira has four fortified sectors. Harappa has four fortified sectors. Kalibangan has three fortified sectors. Lothal

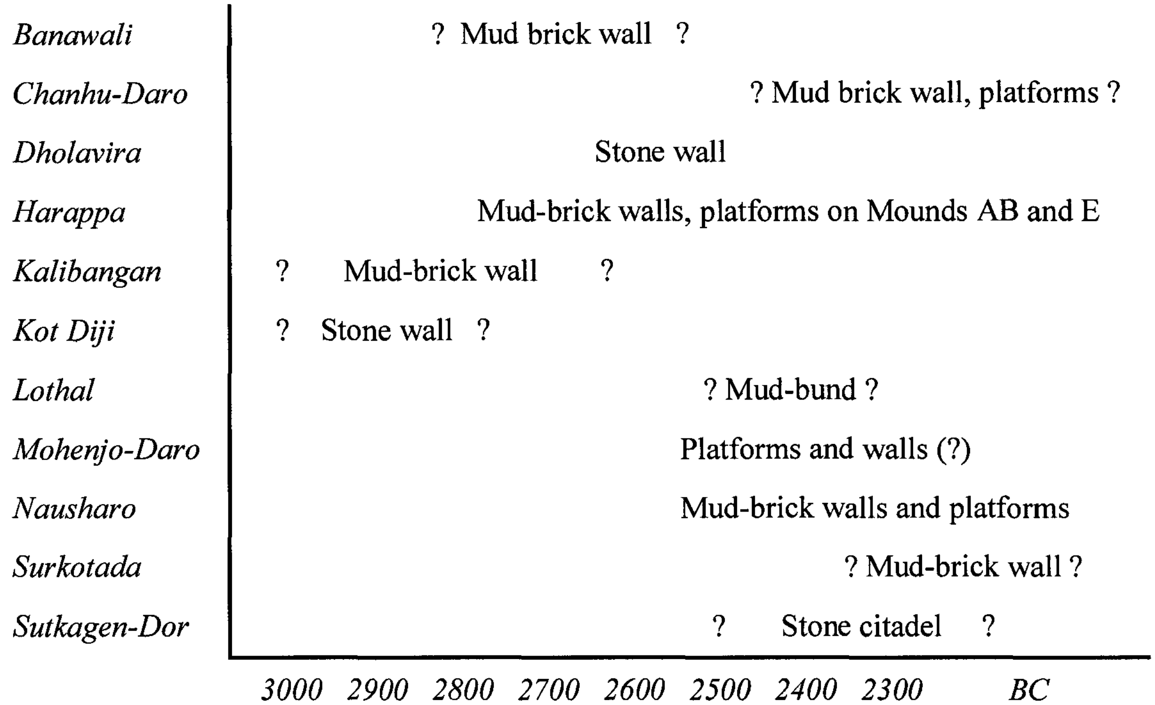


Figure 63: Approximate Dates of Construction of the Harappan Fortifications

has two fortified sectors. Mohenjo-Daro is a controversial case, yet the recent research by the Italian team shows that some or possibly all of the mounds and areas of Mohenjo-Daro have perimeter walls. Nausharo has two fortified sectors. Surkotada has two fortified sectors. In addition, most of these sites reveal occupational deposits beyond the city walls; in other words, besides fortified sectors, they have sectors not protected by the walls yet separated from the rest of the site.

Accentuation of space: In addition to segregating sites into large distinct sectors, freestanding walls divide and accentuate important places. On some sites, they create empty spaces, long passages and open areas, some of which may have ritual or political

function (Dholavira). On other sites, they divide fortified areas into relatively small and distinct sectors (Kalibangan, Surkotada). On many sites, walls delineate block borders and residential complexes (Nausharo).

Criteria grouped under each of these four themes point to ideational meanings. Platforms accentuate the significance of certain buildings and areas by using elevations as means of ideological significance. Monumentality, being a feature of platforms and internal fortifications, conveys a message from one group to another, often within the area of the same site. Gates restrict access to the sites, making the passage of people and vehicles complicated and controlled. Fortification walls that divide the sites into distinct sectors maintain the existing sociopolitical order. The creation of small sectors, passages and empty spaces reflects ritual or political ceremonialism; no military, ecological or any other practical reason would justify the splitting of the Western Sector at Kalibangan or the creation of a long passage in front of the North Gate at Dholavira. Finally, differences in the date of construction and the strength of fortifications – Harappa was surrounded by perimeter walls long before Nausharo, or Dholavira had more elaborate fortifications than Banawali and Lothal – points to the internal (sociopolitical or ritual) rather than external (military) functions.

Thus, *fortifications of Banawali, Dholavira, Harappa, Kalibangan, Lothal, Mohenjo-Daro, Nausharo, and Surkotada create three-dimensional and segregated worlds which are characterized by restricted access and hidden monumentality. The cause and meaning of these worlds is ideological, not utilitarian. In other words they convey ideas rather than protect the enclosed areas from floods or foes.* To theorize on what kind of ideas these could be, we need to turn to the data on authority.

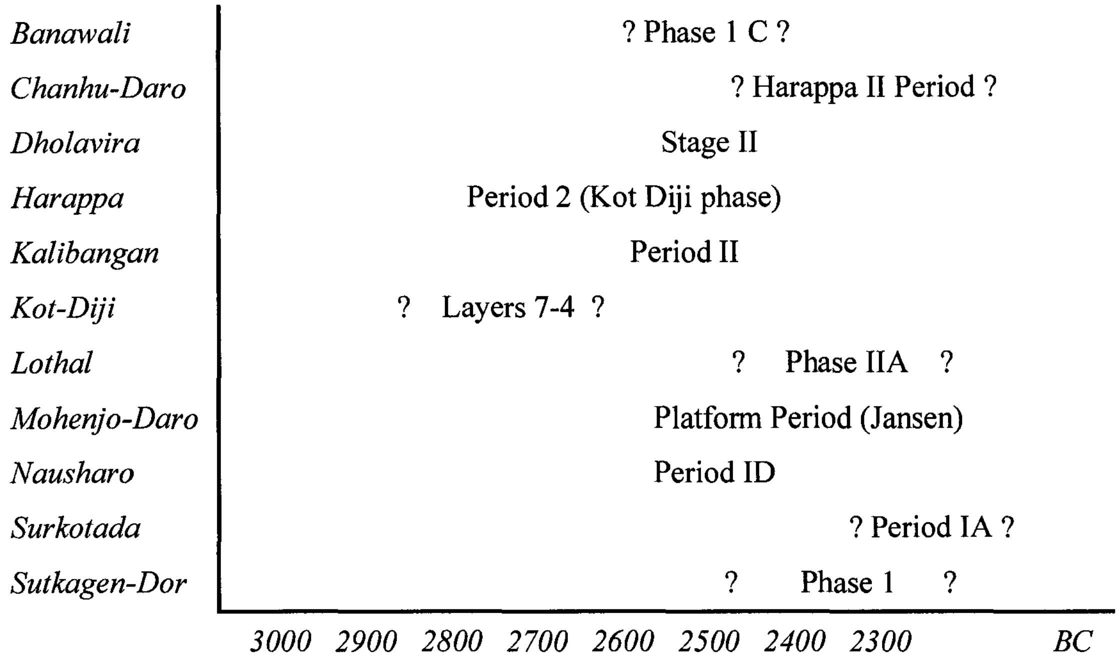


Figure 64: Relative and Absolute Dates of Emergence of Authority on Harappan Sites

The nature of authority: To trace the emergence of authority on each of the twelve Harappan sites, I have followed the same method as in the previous chapter, i.e., have traced simultaneous and drastic changes in the material culture of each of these sites. The following is a brief site-by-site summary of my argument (see figure 64).

In Allahdino, evidence for authority is associated with the transition from Phase 2 to Phase 1. The innovations of Phase 1 include structures of possible public function, a household water system, a small-scale irrigation network, and the grouping of public structures in one part of the site. In Phase I, although remaining a small village, Allahdino becomes fully acculturated in the world of the Harappan civilization. Given the rapidity of cultural changes (the entire sequence of Allahdino lasts no longer than one hundred

and fifty years), authority plays a role in this acculturation. Yet like most artifacts in Allahdino are from outside, authority is exported from a larger center of power.

In Banawali, authority becomes evident during Phase IC, which marks a transition from the pre-Harappan to Mature Harappan layers and is dated roughly to the middle of the third millennium BC. During this phase, the whole settlement is rebuilt anew, fortification system is renovated, the division into two fortified sectors is established, architecture becomes more sophisticated, and the new street system oriented in accordance with cardinal directions is laid out.

In Chanhu-Daro, authority is present by the second Harappan period. The periodization and chronology of this site are however so poorly defined, that it is currently impossible to trace the emergence of authority with better precision.

In Dholavira, authority emerges either during Stage IIIA or during Stage II. Based on three lines of evidence – monumentality, site expansion, and the principles of planning and architecture – I have argued that stage II foreordains the efflorescence of stage III. Harappa provides clear evidence for authority by Period II (Kot Diji Phase) which starts around 2800 BC. The innovations of this Period that are directly indicative of authority include: the construction of fortifications and the emergence of distinct fortified sectors, the expansion of the site, the intensification of structural activities, brick standardization, the emergence of seals and possibly standardized weights and measures; the sophistication of craft technology and development of long-distance trade.

In Kalibangan evidence for authority appears in the beginning of Period II around 2600/2500 BC. The innovations indicative of authority include settlement expansion, the renovation of fortifications, the division into three fortified areas, orientation along the

cardinal directions, and the construction of platforms in the southern part of the western sector.

In Kot Diji, evidence for authority (if any) is associated with Period II (layers 7-4) of my periodization, and the later part of Period I (Kot Dijian) of Khan's periodization. This period witnesses the expansion of the settlement, complete degeneration of fortifications and the emergence of new architectural patterns. Interestingly, evidence for authority becomes less evident during Periods III and IV of my periodization or Period II (Harappan) of Khan's periodization.

In Lothal, archaeological evidence for authority is associated with the transition from Phase I to Phase IIA. This transition witnesses settlement expansion, the construction of platforms, the renovation of fortifications, the division of the site into distinct fortified sectors, the construction of the 'dock' and the 'warehouse', a general intensification of structural activities, and the establishment of street layout in accordance with cardinal directions. Importantly, all these changes can be placed in a relatively short period of time; Phase IIA arguably lasts for less than a hundred years.

Mohenjo-Daro provides the strongest case for authority of all the reviewed sites. The Stupa Mound alone is as an epitome of authority in the Harappan civilization. Platforms, public architecture, planning and most other characteristic features of Mohenjo-Daro would not have been possible without the existence of a rigid social structure and strong authority. The emergence of authority on this site is nonetheless obscure. Evidence for authority is found throughout all the cultural periods and nothing is known about the pre-Harappan levels.

In Nausharo, the emergence of authority can be ascribed either to Period II dated to 2500 – 2300 BC or to Period ID dated to 2600-2500 BC. Period II is defined by fortifications, platforms, monumental architecture, grid planning in accordance with cardinal directions and the division in sectors. Period ID sees the construction of the first fortifications, the beginning of the division into fortified sectors and the building of a massive architectural complex on the northern mound. Following Jarrige, I have argued that the traits of Period ID are sufficient to indicate the emergence of authority.

Surkotada is a founder's settlement. Evidence for authority on this site is found throughout all three periods and includes massive architectural projects, the division into two fortified sectors, and a large number of characteristically Harappan artifacts. Based on the structural history of fortifications and the site layout, I have suggested that during Period IA and IB Surkotada was characterized by a heterarchical sociopolitical system. In Period IC heterarchical system must have attained hierarchical features; strengthening of the western sector, the construction of a gate-complex and the replacement of an interconnecting ramp with a passage support this interpretation.

Sutkagen-Dor is another founder's settlement, possibly surrounded by culturally alien populations. Like in Surkotada, evidence for authority is present in the deposits of all periods and includes massive architectural projects. Interestingly however, the site lacks the division into fortified sectors and some typically Harappan artifacts (writing, seals and bead ornaments). I have explained this as a result of relative social homogeneity of those who resided at the site, and have proposed that Sutkagen-Dor was founded by a group of Harappan colonists united by a clear goal; i.e., resources, political control or the exploration of new territories.

Thus, in reassessing data from site to site, I have come across a large number of archaeological traits, which in one way or another indicate the emergence of authority. The significance of these traits as evidence for authority can be discussed under four general topics: size, layout, architecture and material culture.

Size: A drastic and fast site expansion almost universally implies increase in social complexity and possibly the emergence of ruling groups. Unfortunately, many Harappan sites lack quality data to trace the dynamics of site expansion. Of the twelve sites discussed in this chapter, only Dholavira, Harappa, Kalibangan, Kot Diji, and Nausharo provide some data for establishing the time frame and scale of expansions. Sutkagen-Dor and Surkotada seem to have been founded from a scratch on a new territory. Allahdino is a small agricultural village, which did not undergo any major increase in size. Other sites either lack data on the pre-Harappan occupations, or the existing data are not sufficient for establishing the size of early settlements.

Layout: An idiosyncratic layout is one of the most evident manifestations of the Harappan urban phenomenon. Advance planning, orientation according to cardinal directions, the grouping of public structures, and the division into distinct fortified sectors are usually quoted as typical of Harappan sites. Each in its own way, these traits imply authoritative decisions. Not all of them however are equally present on Harappan sites. The most unique and widely spread feature is the division in distinct sectors, or in more interpretative terms, urban segregation.

Structural activity: Many Harappan sites conceal the remains of massive architectural projects; i.e., mud and mud-brick platforms, perimeter walls and public buildings. Massive architectural projects in turn are among the best indicators of

authority, for they require the organization of labor, advance planning, acquisition of resources and, most importantly, a good reason for construction. All of these preconditions are impossible without a high degree of social differentiation – either hierarchical or heterarchical - and authoritative decision-making. Of the reviewed twelve sites, all but Allahdino reveal traces of massive architectural projects.

Material culture: There are several types of Harappan artifacts, potentially indicative of authority. These include seals, inscribed objects, standardized weights, bricks of the standard ratio, precious jewelry, and the objects of long distance trade. The use of these artifacts as direct evidence for authority can be however very misleading. For example, the reassessment of data from Kot-Diji and Allahdino shows that the presence of writing does not necessarily imply the presence of authority. On the other hand, the cases of Dholavira and Harappa during the Pre-Harappan Period or Sutkagen-Dor during the Mature Harappan period show that the lack of writing does not necessarily imply the lack of a strong authority. The matter of the fact is that on many sites authority emerges prior to or after the appearance of the aforementioned artifacts.

Thus, archaeological evidence for authority on Harappan sites rests on three sets of data: size, layout and structural activity. Moreover, since the dynamics of site expansion are often obscure, *layout and structural activity become key material expressions of authority on most of the reviewed sites*. More specifically, this means that in Banawali, Dholavira, Harappa, Kalibangan, Lothal, Mohenjo-Daro, Nausharo, and Surkotada, evidence for authority comes primarily from the idiosyncratic layout (the division in sectors) and massive architectural projects (platforms, walls, gates, moats and public buildings). Besides public buildings however, these traits are all facets of

fortification systems, whose quintessential meaning as I have argued above is the creation of three-dimensional and segregated worlds with restricted access and hidden monumentality. The material expression of authority thus can be described in the same terms as the meaning of fortifications. Indeed, aside from several public buildings – "granaries", the great bath, etc. – *authority on these eight sites expressed itself solely in the implementation of massive public works and the segregation of space.* Neither public works nor the segregation of space however had a clear utilitarian cause. As I have argued above, the construction of platforms and walls had in most cases an ideational rather than utilitarian significance.

What all these mean is an intriguing question. Platforms, walls and urban segregation present a unique and enigmatic pattern of authority in an ancient civilization. In my view, the very existence of this pattern on several important sites implies that the rulers or ruling groups of these sites shared at least several common traits in ideology, function and the mechanisms of power. It is certainly very difficult to reconstruct the precise nature of these traits. Given the lack of variables and the equifinality of archaeological explanations, there can be at least several competing theories. The one that I would like to propose makes an emphasis on the holistic and idiosyncratic worldview.

I believe, authorities at Banawali, Dholavira, Harappa, Kalibangan, Lothal, Mohenjo-Daro, Nausharo, and Surkotada brought into play *a unique and complex worldview. This worldview was focused on the structure of the universe and possibly foreordained the later cross-cultural concepts of terrestrial axis and the world tree. Archaeologically it became expressed in a three-dimensional and segregated layout of the sites and the restricted access to certain areas.* Three-dimensionality of the Stupa

Mound at Mohenjo-Daro, empty spaces at Dholavira, the massive dividing wall at Nausharo as well as other traits that embody the world as a mutlitiered, compartmented yet single whole are the products of this view. Without the credible decipherment of the Harappan script or the new readings of the Harappan iconography, it is difficult to say anything more concrete, yet one cross-cultural analogy comes to mind. Despite drastic cultural, linguistic and sociopolitical differences, the early Mesoamerican city-states and culture-areas shared a set of beliefs, ideas and rituals (cosmovision) that made it possible to view them as a cultural whole. I believe the core sites of the Harappan Civilization should be approached in a similar way.

The function of the Harappan authorities was thus affected by their views. *The initiation of massive structural projects, such as platforms, gates and dividing walls was driven by the desire to implement this ideology in practice, to mingle the view of the world with the daily life of metropolitan sites, and ultimately to create a mesocosm, i.e., a miniature replica of the universe*. This model I believe is applicable to major Harappan sites, the key centers of power and ideological control. Clearly, there are exceptions. Intermediate centers, small rural settlements, colonial outposts or the sites not fully belonging to the Harappan ideological realm do not have to follow the same pattern. Of the twelve sites discussed in this chapter, four belong to the latter type of sites. The location and material culture of each of these four sites provide explanations why they do not reveal the pattern of the metropolitan ideological centers. Allahdino is a small rural settlement. Although fully incorporated in the Harappan trade networks and, as I have suggested, affected by authoritative decisions from outside, Allahdino is clearly insignificant as a political or ideological center. Chanhu-Daro is an important

intermediate center, significant economically, yet not ideologically. Kot Diji is an interesting case, for it seems to have been an important flourishing center in the early part of the third millennium yet a place of minor significance in the second half of the third millennium. Finally, Sutkagen-Dor is a colonial outpost. As I have argued above, it must have been founded by a small and socially homogenous group of Harappan colonists united and led by an exploratory goal. A strong authority must have been present at Sutkagen-Dor, yet its nature and function are fundamentally different from those of the major sites.

The Harappan city and the thought expressed in it: In the end of the third chapter, I arrived at the conclusion that the model of the city extracted from the Sanskrit and Pāli texts in the second chapter adequately reflects the archaeology of the Ganges Civilization and enhances our understanding of the phenomenon of the Gangetic city. The analysis of archaeological data carried out in this chapter has provided yet another example of how this model can work in the context of South Asian archaeology. The view of the city as a combination of authority and fortifications appears to be helpful not only in the context of the Ganges Civilization, a culture which was roughly contemporaneous with the genesis of this view, but is also applicable to the Harappan Civilization, a culture whose emergence had preceded this view by at least two thousand years.

The relationship between the construction of fortifications and the emergence of authority on the Harappan sites is not as straightforward as on the Gangetic sites (see figures 63, 64). Of the twelve sites reviewed in this chapter, eleven reveal sound evidence for authority and at least nine are fortified. One can distinguish three types of sites based

on the temporal relationship between the construction of fortifications and the emergence of authority.

On the sites of the first type, the earliest perimeter walls precede the emergence of authority. This type includes Banawali, Kalibangan and Lothal. In Banawali, the first perimeter wall is built in Period IB dated roughly before 2600 BC. The scale of the wall and the traits of material culture attributed to this period do not indicate the presence of authority. The following Period IC however provides unambiguous evidence for authority as well as sees the construction of the new system of fortifications that divide the site in sectors. In Kalibangan the first perimeter wall is built in the beginning of Period I soon after 3000 BC. This period in my view does not provide enough evidence for authority, which emerges after a significant break in occupation in the beginning of Period II around 2600-2500 BC. In Lothal initial fortifications are built during the Pre-Harappan Phase 1. Clear evidence for authority as well as more substantial fortifications and platforms are associated with the Harappan Phase 2.

On the sites of the second type, the construction of fortification is roughly contemporaneous with the genesis of authority. This type includes Dholavira, Harappa and Nausharo. In Dholavira, the earliest perimeter wall is constructed during Stage I dated by Bisht to ca. 2650-2550 BC. Evidence for authority begins to emerge during Periods I and II (2650-2500). In Harappa both authority and segregated fortifications are present at the site the latest by the Kot Diji Phase (2800 BC). In Nausharo, authority and fortifications appear during Period ID around 2600-2500 BC.

The third type is represented by the so-called founder's settlements. The two sites that certainly belong to this type are Sutkagen-Dor and Surkotada. Both of these sites

seem to have been planned and founded on virgin soil by newly arriving groups. Whether Mohenjo-Daro and Chanhu-Daro belong to the same type of settlements is a controversial issue. Currently, neither of these two sites provides clear evidence for the pre-Harappan occupations.

Thus, in some cases the construction of perimeter walls precedes the emergence of authority. In other cases, the emergence of authority is contemporaneous with the construction of fortifications. Under both scenarios however, authority and fortifications can be viewed as an epitome of the city; for it is their mutual presence that marks the time of most drastic qualitative changes. What this means is that from the viewpoint of the model formulated in the second chapter, Banawali, Dholavira, Harappa, Kalibangan, Lothal, Mohenjo-Daro, Nausharo, Sutkagen-Dor and Surkotada are cities. Allahdino is a rural settlement existing in the shadow of larger centers of power and interaction. Chanhu-Daro and Kot Diji are middle size settlements, which from the view of this model do not qualify to be called cities.

Coming back to Collingwood and his understanding of history, we may conclude that as the idea of the city, the model proposed in the second chapter is perfectly applicable to the sites of the Harappan Civilization.

Chapter 5. The Idea of the Ancient Indian Civilization

> Civilizations, like sand dunes, are firmly anchored to the hidden contours of the earth; grains of sand may come and go, blown into drifts or carried far away by the wind, but the dunes, the unmoving sum of innumerable movements, remain standing.
>
> (Braudel 1973: II.757)

Introduction

In anthropological and historical theory, the concept of the city has for many years been closely associated with the concept of civilization. In the archaeology of early complex societies, the city is still seen as the hallmark of civilization and the emergence of cities is argued to mark the emergence of civilization. This premise stems from the writings of several social thinkers and in particular from the definition of the Urban Revolution proposed by V. Gordon Childe.

The relationship between the concepts of the city and civilization is nevertheless more complex than it may first seem to be. As one well-known specialist in ancient urbanism has asserted,

> The etymological link between the words 'city' and 'civilization' is wholly inadequate as a guarantee of their synonymity, and the attempt to combine them in a conjoint definition only engenders unnecessary difficulties. This, of course, is not to deny the very real broad correspondence that commonsense establishes between urban life on the one hand and civilization in any of its multitudinous manifestations on the other, but this is not ground for an *a priori* assumption that cities and civilization developed contemporaneously (Wheatley 1971: 386).

This chapter has three parts. The first part reviews the hallmarks of civilizational theory and proposes an alternative definition of civilization. The second part introduces

two analytical models representing the views of historical agents with regard to idea of civilization. The third and final part puts forward a model of the ancient Indian Civilization. By discerning the similarities between the Harappan and Gangetic cities and incorporating the perspective of historical agents, it defines the ethos of the ancient Indian Civilization and proposes a hypothetical model of its genesis.

The Idea of Civilization

The most influential and long-lasting definition of civilization in archaeology stems from the writings of V. Gordon Childe, and in particular from his brief yet groundbreaking article *Urban Revolution* (Childe 1950). Although the primary aim of this article was, in Childe's words, "to present the city… prehistorically as the resultant and symbol of a 'revolution'…," Childe's argument was closely tied to Morgan's evolutionary paradigm of savagery, barbarism and civilization (Childe 1950: 3). Consequently, Childe's well-known list of ten criteria that "served to distinguish… the earliest cities" became equally associated with the concept of civilization (Childe 1950: 17). These ten frequently quoted criteria included: dense population; full-time specialist craftsmen, transport workers, merchants, officials and priests; tithe or tax to an imaginary deity or a divine king who thus concentrated the surplus; truly monumental public buildings; a ruling class; writing and numerical notation; exact and predictive sciences – arithmetic, geometry and astronomy; full-time artists; regular foreign trade; and a state organization based on residence rather than kinship (Childe 1950).

Childe's thesis had an immediate effect on his contemporaries. Two years later, Robert Braidwood proposed another archaeological definition of civilization, reminiscent

both in form and content of that of Childe. The list of traits assembled by Braidwood included: fully efficient food production; cities; formal political state; formal laws (a new sense of moral order); formal projects and works; classes and hierarchies; writing; and monumentality in art (Braidwood 1952: 2). Following Braidwood, Robert Adams defined civilization from a functional point of view. The attainment of civilization, according to Adams, was expressed in four parallel processes: "urbanization, militarization, stratification, and bureaucratization" (Adams 1960: 271). Civilization, according to Adams, was

> a functionally interrelated set of social institutions: class stratification, marked by highly different degrees of ownership or control of the main productive resources; political and religious hierarchies complementing each other in the administration of territorially organized states; a complex division of labor, with full-time craftsmen, servants, soldiers, and officials alongside the great mass of primary peasant producers (Adams 1960: 270).

In archaeological theory, many changes have taken place since the time of Childe and his immediate successors. Today, instead of civilization, many Anglo-American archaeologists prefer the term 'complex society'. This preference is explained primarily by the derogatory use of the term 'civilization' in the past. The desire to fully replace 'civilization' with 'complex society' nonetheless turns out to be a futile effort. As recent historical, sociological and anthropological literature shows, the term 'civilization' remains widely used. Some scholars continue to define civilizations as cultural, geographical and sociopolitical phenomena. Others look into possibilities of a generic and all-inclusive definition. Archaeologists still refer to Childe and view the emergence of cities as a hallmark of civilization. In spite of all the changes and innovations in archaeological theory, the paradigm of the two revolutions – agricultural and urban, with

the latter marking the threshold of civilization – remains the dominant model for the conceptualization of protohistory.

Nevertheless, when placed in specific spatial, temporal and cultural contexts, archaeologists and historians tend to define ancient civilizations in ways that stand in striking contrast to the Childean paradigm.[57] Let us consider two examples: the definition of the ancient Chinese Civilization by K.C. Chang and the definition of the Indian Civilization by S.C. Malik.

K.C. Chang was one of the most prolific and influential archaeologists of ancient China in the twentieth century (Chang 1976, 1980, 1983, 1986, 1989, 2000). After many years of research, he concluded that neither the genesis nor the nature of the earliest Chinese Civilization could be explained by the Childean models. Western hypotheses on the rise of civilizations, according to Chang, failed to explain the genesis of Chinese Civilization (Chang 1989: 161).

> To the social scientist seasoned in the theories of Marx, Engels, Weber, Childe, and other with regard to social evolution and the rise of urbanism and state society… the Chinese road to civilization appears to be an aberration… (Chang 1989: 165).

Instead, Chang believed, that the genesis of the ancient China Civilization was a gradual process rather than a revolution. In contrast to most western definitions of civilization, it displayed "continuity between man and animal, between earth and heaven,

[57] One must say that there have been several attempts to reconcile anthropological, archaeological and historical perspectives to the term 'civilization' (Redfield 1962). For example, Redfield has proposed to focus on four terms: identity, delimitation, unity and form. Identity to him is the separation of a civilization from everything else; delimitation is the boundary of the identity; the unity is the similarity between its substantial qualities; and the form is what "remains the same when everything else changes". In other words, the form is equivalent to the sociopolitical, cultural or any other deep structure. Redfield's model is clearly reminiscent of those by Toynbee's and Braudel, and the city is not seen as a prerequisite of civilization.

and between culture and nature" (Chang 1989: 165). Moreover, it was the political processes and complex ritual, not the innovations in the means of production and trade, that were responsible for the growth of sociopolitical complexity that led to the emergence of civilization in China (Chang 1983).

> The wealth that produced the civilization was itself the product of concentrated political power, and the acquisition of that power was accomplished through the accumulation of wealth. The key to this circular working of the ancient Chinese society was the monopoly of high shamanism, which enabled the rulers to gain critical access to divine and ancestral wisdom, the basis of their political authority. Most of the markers of the ancient civilization were in fact related centrally to this shamanism (Chang 2000: 2).

Thus, the emergence of civilization in China, in Chang's view, was a smooth process instigated by ideational factors. Most importantly, the ethos of this civilization was ideological: it was created and existed "within a framework of cosmogonic holism" (Chang 1989: 161).

The definition of the Indian Civilization by S.C. Malik is somewhat similar; the ideational, rather than economic factors define, in Malik's view, the ethos of ancient India. As I have mentioned at the end of the first chapter, Malik argued that from its inception at the Harappan stage, the Indian Civilization – the 'Indian Style' in his terminology – was characterized by three traits: caste, the genealogical means of the perpetuation of caste by birth, and the importance of orality and memorization in the transmission of ritual and other forms of knowledge (Malik 1968: 106-108). The emergence of the Indian Civilization thus was dated to the mid-third millennium BC and its ethos was defined through purely ideational institutions. Importantly, none of these institutions required the emergence of cities, writing and many other traits, usually included in the archaeological definitions of civilization. One must say that Malik was a

vigorous advocate of an interdisciplinary and holistic approach to the study of ancient South Asia:

> a civilization as a totality, such as the Indian one, is more than just these various ways of analysis because civilizations are organic wholes, and may only be comprehended as such. Therefore, it is in this organic sense that there is something about India which not only anthropologists are able to characterize as a 'unique configuration' but this organic whole is also evident to the non-academic 'lay'. We must thus say that there is a specific quality of an 'Indianness' of its civilization as opposed to Chinese or the European ones, etc. (Malik 1968: 58).

Obviously, Chang's and Malik's interpretations are debatable and there are other points of view with regards to the emergence and nature of the ancient Chinese and ancient Indian Civilizations. What is however important is that these interpretations are no exceptions. Today, a number of case-studies – from Greece to Mesoamerica – present early civilizations in terms that are very different from those of the traditional archaeological paradigms of civilization and urban revolution.[58] In this respect, a few words need to be said about the history and meaning of the term 'civilization'.

To my knowledge, no one has yet compiled a comprehensive interdisciplinary concordance of all the definitions of civilization. Yet, there are several thorough reviews dealing solely with the origin and semantics of this term (Benveniste 1966: 336-345, Braudel 1969, 1987, Dampierre 1961, Febvre 1930, Kroeber & Kluckhohn 1952, Marrou 1938, Redfield 1962, Toynbee 1934-1961: XII.273-279, 282-292).[59] As an idea, civilization went through a number of drastic conceptual transformations. Formulated by

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[58] For example, consider some recent studies of city-states in ancient Greece (Osborne 1987, Polignac 1984, 1995, Rich & Wallace-Hadrill 1997) and Mesopotamia (Steinkeller 2003).

[59] Written by prominent linguists and social thinkers, some of these reviews are quite remarkable. Those written by Fernand Braudel and Arnold Toynbee are in my view particularly illuminating: in them, Toynbee and Braudel reconstruct a step-by-step history of the term 'civilization' to promote their own interpretations (Braudel 1969, 1987, Toynbee 1934-1961: XII).

the thinkers of the French Enlightenment as an antonym to barbarism, the term 'civilization' had for a long time carried an ethnocentric and moral connotation. As Braudel once noted, "the substantive *civilization* had to be… invented, and made up", it was "enlightenment", which could "hardly be imagined without a well-bread, well-mannered, and "polite" society to sustain it" (Braudel 1980: 180). By the middle of the nineteenth century, the purely idealistic notion of civilization in the singular had nonetheless been replaced by the notion of civilization in the plural. As the disciplines of history, ethnology, anthropology, archaeology, and sociology branched and developed during the nineteenth and twentieth centuries, the idea of civilization obtained numerous and often very different meanings. By the middle of the twentieth century, civilization became an extremely multifaceted and interdisciplinary concept. As "one of those words which show a new vision of the world" (Benveniste 1971: 289), civilization was conceptualized in a multitude of meanings, at least some of which by that time had very little to do with the meanings originally implied by Francois Guizot (1828, 1829-1832), Victor de Riqueti (1756) and Voltaire (1756, 1769).[60] To give an example of how diverse the perceptions of civilization had become, one could refer to the meanings of culture, a term that is very closely related to the idea of civilization. In 1952, two prominent American anthropologists – Alfred Kroeber and Clyde Kluckhohn – published a book in which they reviewed one hundred and sixty one definitions of culture (Kroeber & Kluckhohn 1952). Without doubt, had one decided to collect all the definitions of

[60] It is argued that in the works of these individuals the word civilization appears for the first time in its sociopolitical and ethical meaning. Although Voltaire omits using the word 'civilization' directly, the notion of civilization is implied in his treatment of the world history (see discussion on this issue in the beginning of *Grammaire de Civilizations* by Braudel and Johan Huizinga).

civilization, he or she would have come up with a comparable number. Lewis Morgan (1877), Friedrich Engels (1884), Oswald Spengler (1918), Arnold Toynbee (1934-1961), Pitirim Sorokin (1948, 1992), Alfred Kroeber (1948, 1953, 1957), V. Gordon Childe (1934, 1939, 1947, 1950, 1951, 1953), R. G. Collingwood (1942), Robert Braidwood (1952, 1963), Philip Bagby (1959), Robert Redfield (1947, 1953a, 1953b, 1962, 1954), Robert Adams (1960, 1965, 1968), Lewis Mumford (1961), Carroll Quigley (1961), Kent Flannery (1972), Colleen Renfrew (1972), Elman Service (1975), Charles Redman (1978), and Fernand Braudel (1949, 1969, 1987) are just a few among many historians, anthropologists and archaeologists who have tried to formulate a generic definition of the term 'civilization'. It would not be an exaggeration to say that in the nineteenth and twentieth centuries almost every historian or anthropologist whose intention it was to create a holistic model of world history had to cope with the idea of civilization.

My purpose is more humble. First, I would like to demonstrate the breadth and flexibility of the term 'civilization'. To do so, it is not necessary to review every single definition. It will suffice to refer to several philosophers and historians whose interpretations are particularly noteworthy. The writings of Friedrich Engels, Oswald Spengler, Arnold Toynbee and Fernand Braudel fit this purpose the best, for they present very different analytical perspectives. Importantly, a review of their ideas will enable me to propose an alternative view of a civilization in a given culture-historical context.

In the works of the founders of the communist theory, Karl Marx and Friedrich Engels, the idea of civilization plays a prominent role. It is Engels alone, however, who in the book *Origin of the Family, Private Property and the State*, lays the foundation for the Marxist view of what civilization is. According to this view, civilization is "a stage of

development in society", and human progress – from primitive communism to the dictatorship of proletariat and the ultimate communism – is impossible without attaining this stage. Civilization is defined in purely socioeconomic terms, by the division of labor, the exchange between individuals… and the commodity production which combines them both. In civilization, these three innovations are argued to have come to their full growth and have revolutionized the whole of previous society (Engels 1884: 158-159). In other words, all the attributes of early civilizations pinpointed by archaeologists – writing, monumental architecture, state-level sociopolitical organization, or urbanism – are not the essence of civilization but mere reflections and consequences of drastic changes that take place in the economic infrastructure. Although obsolete in the view of many contemporary social thinkers, this kind of economic determinism is alive in some quarters. Viewing the means of production as a driving force of social evolution has by no means lost its significance. To give an example, a prominent Russian assyriologist and ancient historian, Igor Diakonoff, in his recent conceptual synthesis of world history, has attempted to present similar ideas on a new empirical level. Although Diakonoff avoids the direct use of the term 'civilization', its spirit is hidden beyond the linear eight-stage-model that he proposed for the entirety of human history. The third phase in this model is titled "The Early Antiquity" and its association with Childean civilization is quite apparent (Diakonoff 1994, 1999).

In contrast to the linear, mechanistic and positivistic view of civilization by Marx and Engels, civilization of Oswald Spengler is idealistic, poetic, and decadent. To solve 'the problem of civilization' is one of the main tasks of Spengler's treatise *The Decline of the West*. In it, Spengler envisions civilization as "the organicalogical sequel, fulfillment

and finale of a culture". Every Culture, in his view, has its own Civilization", and "the Civilization is the inevitable destiny of the Culture" (Spengler 1950: I.31). Civilizations in the plural, in Spengler's words, are:

> the most external and artificial states of which as species of developed humanity is capable. They are a conclusion, the thing-become succeeding the thing-becoming, death following life, rigidity following expansion, intellectual age and the stone built, petrifying world-city following mother-earth and the spiritual childhood of Doric and Gothic. They are an end, irrevocable, yet by inward necessity reached again and again (Spengler 1950: I.31).

Regardless of the contemporary value of Spengler's ideas, one must admit that his definitions of civilization epitomizes two very important traits that until today are very closely associated with the idea of civilization. These two traits are urbanism and culture. As I have discussed in the introduction to the second chapter, the city, in Spengler's view, is the decadent culmination of culture. Since civilization is the culmination of culture as well, it is unattainable without cities. The city and money, according to Spengler, are the two most obvious and degenerate expressions of civilization.

The two great twentieth century historians to whom the idea of civilization has been particularly dear are Arnold Toynbee and Fernand Braudel. The narrative of Toynbee's voluminous treatise *A Study of History* develops around the story of twenty odd civilizations meant to stand for the entirety of human history. Interestingly, having spent almost thirty years writing this opus, Toynbee provides no precise definition of the term civilization until the very last volume, when requested to do so by his colleagues and opponents. First he draws a distinction between civilization and civilizations. Civilization according to him is a process that is still going on. Interpreted in concrete historical terms, it is "an attempt to attain the kind of culture that had been attained by citizens of a Graeco-Roman (… Hellenic) city-state", and is consequently synonymous

with the process of Hellenization that took place in the Near East after the third century BC (Toynbee 1934-1961: XII. 273). Defined in broader philosophical, or as Toynbee puts it, in 'spiritual' terms, civilization is "an endeavor to create a state of society in which the whole of mankind will be able to live together in harmony, as members of a single all inclusive family" (Toynbee 1934-1961: XII. 279). Civilizations in the plural mean to Toynbee "particular historical exemplifications of the abstract idea" of civilization in the singular. Defined objectively, they are "one species of the genus 'culture' (Toynbee 1934-1961: XII.282), and "the common ground between the respective individual fields of action of a number of different people" (Toynbee 1934-1961: 284).

The concept of civilization advocated by Braudel is more prosaic. Not particularly interested in defining civilization as a spiritual and idealistic phenomenon, Braudel instead focuses on civilizations in the plural. Given his passion for structural analysis, the study of a civilization, in Braudel's view, is the building of models. Civilizations are just another form of the *longue duree*, which can be investigated in a multitude of ways (Braudel 1980: 208-209). On one occasion, Braudel defines a civilization as contingent upon three sets of criteria: cultural areas with frontiers, intercultural borrowings, and the refusals of intercultural borrowings (Braudel 1980: 202-203).[61] On another occasion, he

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[61] Although this definition is not new – Braudel borrows it from the writings of Marcel Mauss (Mauss 1929) – in Braudel's interpretation it has a novel meaning. Cultural areas are seen as confining a great variety of cultural attributes in a territorially bound space. It is these attributes in their totality that determine the form of a given civilization. Intercultural borrowings are traits or goods that being "constantly on the move" travel back and forth from civilization to civilization. Refusals are those cultural traits or goods that either intentionally or unintentionally denied access into the cultural loci of certain civilizations (Braudel 1980: 203).

offers a more functional definition, according to which a civilization combines a multitude of traits grouped under four topics: the geographical area, society, economy, and the way of thought (Braudel 1993: 9-22). Finally, at some point, Braudel portrays a civilization in more ideational terms. It is

> neither a given economy nor a given society, but something which can persist through a series of economies or societies, barely susceptible to gradual change. A civilization can be approached, therefore, only in the long term, taking hold of a constantly unwinding thread – something that a group of people have conserved and passed on as their most precious heritage from generation to generation, throughout and despite the storms and tumults of history" (Braudel 1993: 35).

The least that all of these definitions show is that after more than two hundred years of vigorous use in different contexts, the term civilization has outgrown its intellectual roots. Today, civilization is more than a term; it is a powerful conceptual framework used in different social sciences and humanities. In the second chapter, when discussing the intelligibility of the idea of the city, I have presumed that the city as a complex sociopolitical and cultural phenomenon can be studied and conceptualized in a multitude of ways from the point of view of several academic disciplines. Without doubt, the same can be said about the idea of civilization. Like cities, civilizations can be investigated and classified based on the infinite variety of criteria. Political structure, social organization, religion and economy are only a few among these criteria. What is more, civilization is a broader and more inclusive concept than that of the city. In fact, it is the most comprehensive analytical unit for the conceptualization of society and culture.

Like many other anthropological and historical concepts originating within western thought, civilization has carried ethnocentric, moral and even racist meanings. Yet, the negative legacy of this term must not overshadow its great analytical achievements. As the prominent French linguist Emile Benviniste once noted, "the whole

history of modern thought and the principal intellectual achievements in the western world are connected with the creation and handling of a few dozen essential words which are all the common possession of the western European languages" (Benveniste 1971: 289). Civilization is certainly one of these words. Since its introduction into the vocabulary of modern European languages in the middle of the eighteenth century, this word has obtained a multitude of meanings many of which have little to do with its original ethnocentric roots. For example, there is a great difference between 'civilization' of Lewis Morgan and 'a civilization' of Fernand Braudel; the former implies the notions of savagery and cultural superiority, while the latter is focused on something essential yet illusory, which lies at the foundation of society and culture and "can persist… barely susceptible to gradual change" (Braudel 1993: 35). Should the civilization of Lewis Morgan be discarded, the civilization of Fernand Braudel remains a powerful analytical tool. That fire causes death and destruction does not exclude the fact that fire is the source of life. In a similar way, if one believes in the validity of all-inclusive structural analyses of large geographical, cultural and temporal entities, one must not see anything wrong with the idea of civilization.

Several scholars who have analyzed the history and semantics of the term 'civilization' have emphasized the importance of distinguishing between civilization in the singular and civilizations in the plural. Civilization in the singular is a generic category, which in my view has little interest to the specialist in a specific cultural locus. This is not to say that this category is useless. Yet as Braudel has asserted, if we wish to understand what civilization is, we must study real instances, rather than any theory of civilizations (Braudel 1993: 36). The two preceding chapters have dealt with two of those

instances: the Harappan Civilization of the third millennium BC and the Ganges Civilization of the first millennium BC. Now the question arises as to whether these two civilizations are the expressions of a larger entity called 'the Indian Civilization'. In answering this question, generic definitions – whether archaeological or historical – are not going to provide much help. Whether as Toynbee's idealistic "endeavor to create a state of society in which the whole of mankind will be able to live together in harmony" (Toynbee 1934-1961: XII.279) or as Childe's materialistic ten traits of an ancient urban center (Childe 1950), civilization in the singular is too generic to reflect the specificities of concrete historical cases. On the contrary, perceived as spines of society and culture, as the largest imaginable cultural entities, as the Braudelian sand dunes, whose "unmoving sum of innumerable movements remain standing" (Braudel 1973: II.757) for hundreds and thousands of years, civilizations in the plural present a viable analytical device for a holistic and all-inclusive study of the past.

Having said this, I tentatively accept the core assumption of the Braudelian view. To me, *a civilization is the deep structure or as Braudel would put it 'the longue duree' of the most complex and largest definable sociocultural unit*. Synchronically, to define a civilization is to discern and describe this deep structure, or more precisely a component of this structure that *remains unchanged for a significant period of time*. Diachronically, to define a civilization is to establish the time of the emergence and the time of the disintegration of this structure. *What makes this view different from that of Braudel is the adherence to the epistemology of subjective humanism proposed in the first chapter*. Two key assumptions of this epistemology are subjectivity and reflectivity. Specifically, I have suggested that there can be no purely scientific and objective interpretation of the

past, and the sociopolitical mentality of historical agents is an intrinsic part of the events, phenomena, processes, structures and models of the past. Now, let me clarify how these two assumptions can affect the study of ancient civilizations.

A civilization is neither thing in itself nor an object subject to a purely objective study. As Toynbee wrote,

> When the anthropologist or the cultural historian tries to analyse the observable qualities that have been his clues to the diagnosis of a culture, he analyses them... in terms of ideas and values. Invisibility is... as common characteristic of all forces that potent in human affairs. Even in the realm of non-human nature, over which Man has now established his mastery, invisible microbes and protons are more potent than visible lions and flashes of lightning. In the spiritual realm, where Man is not master, he has to cope with an invisible network of relations between elements in his own psyche, and with another invisible network of relations between himself and his fellow human beings (Toynbee 1934-1961: XII. 292).[62]

Yet, this invisibility does not make our explanations less meaningful. As I have asserted above, regardless of whether the truth exists and whether it is comprehensible, the desire to acquire it is what really matters. *Civilization is a transcendent and semi-objective category, an idea with the help of which one conceptualizes massive amounts of cultural data. Defining a civilization is like catching a glimpse of a murky, illusory and to a large degree imaginary structure. As an idea, civilization is in permanent transition, swinging between the historical reality, the mind of the researcher and the mentality of historical agents. The emphasis in previous interpretations has been placed on two of these three factors: the historical reality and the mind of the researcher. Not much attention has been given to the perception of ancient peoples, i.e., the historical agents.*

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[62] I do not adhere to the final part of this statement which has an explicit Christian subtext. "And the most potent of the forces that move human souls is the spirit that blows like the incalculable wind whose passage is audible but invisible" (Toynbee 1934-1961: XII.292).

To make the study of civilizations meaningful, one must consider these perceptions carefully and thoughtfully, for they constitute an innate part of the studied civilizations. For example, what Romans, Chinese, or Greeks thought of history and of themselves and how they perceived progress, culture and civilization is not just an alternative view; it is a constituent element of the Roman, Chinese and Greek Civilizations. As Braudel asserted,

> In every period, a certain view of the world a collective mentality, dominates the whole mass of society. Dictating a society's attitudes, guiding its choices, confirming its prejudices and directing its actions, this is very much a fact of civilization. Far more than the accidents or the historical and social circumstances of a period, it derives from the distant past, from ancient beliefs, fears and anxieties which are almost unconscious – an immense contamination whose germs are lost to memory but transmitted from generation to generation. A society's reactions to the events of the day, to the pressure upon it, to the decisions it must face, are less a matter of logic or even self-interest than the response to an unexpressed and often inexpressible compulsion arising from the collective unconscious... These basic values, these psychological structures, are assuredly the features that civilizations can least easily communicate one to another. They are what isolate and differentiate them most sharply. And such habits of mind survive the passage of time. They change little, and change slowly, after a long incubation which itself is largely unconscious too (Braudel 1993: 22).

What makes my intentions different from those of Braudel is that I propose to consider not the ancient mentality in general, but specifically the sociopolitical and historical concepts that can contribute to and alter our own views. In the context of ancient South Asia, this means that we need to find a concept or concepts, which would be similar to or reminiscent of the idea of civilization. I believe, such a concept exists and is hidden within the mythological narratives of the Sanskrit Purāṇas.

The Yuga Story and the Two Definitions of the Indian Civilization

The earliest elaborate concept of time, history and cultural change in the ancient Indian literature is found in the Story of the Yugas, the four cosmic ages that follow one

another in the course of universal time. Although absent in the Vedas, this story is present in several main genres of Sanskrit literature – the Śāstras, the Epics and the Purāṇas.

Despite significant differences between its versions, the Yuga Story has a common core. According to this core, time is divided into the Kalpas, Manvantaras, Mahāyugas, and Yugas. One Kalpa also called The Day of Brahmā consists of one thousand Mahāyugas or fourteen Manvantaras. One Mahāyuga also called Caturyuga (the four fold Yuga) consists of the four Yugas, which are named Kṛta, Tretā, Dvāpara and Kali, each to identify the upside of a die cast in the game of dice. The four Yugas are characterized as historical ages similar to those found in the Greek mythology. Kṛta is the Golden Age, in which the dharma (virtue) is fully present, sickness does not exist, and rivers flow with wine. Tretā is the Silver Age, in which sacrifices come to be practiced, the Veda appears and the dharma deteriorates. Dvāpara is the Copper Age, in which the Vedas multiply, sacrifices and austerities increase in number, and lawlessness becomes common. Finally, the Kali Yuga is the Iron Age, in which lawlessness prevails, the dharma is not respected, mlecchas (barbarians) rule, and the degeneration of the world is observed.

Scholars have analyzed the Yuga Story many times and have proposed a large variety of interpretations (Balslev 1983, Bentley 1808, Brown 1966, Cardona 1991, Chemburkar 1974, Church 1970, 1971, 1974, Dumont 1935, 1964, Eliade 1957, 1959, Fleet 1911, Gable 1920, Gonzalez Reimann 2001, Guenon 1937, A. S. Gupta 1969, Jacobi 1908, Mandal 1968, Mankad 1941-1942, 1942, 1942-1943, Mitchiner 1976-1977, Pargiter 1922b, Roth 1966, Thapar 2000b, Varma 1978-9, Wilford 1794-1808). Most of these interpretations focus on textual history, parallels with other ancient concepts of

time, and the role of the Yuga Story in Indian mythology. Having undergone a long genesis, the Yuga Story nonetheless contains several analytical layers. One of the most neglected and poorly investigated among these layers is historical. Aside from mythology, didactics and the notion of deteriorating dharma, the Yuga Story has incorporated a sophisticated model of world history. The most detailed account of this model is found in the Vāyu and Brahmāṇḍa Purāṇas, the two closely related Sanskrit texts that date roughly to the mid first millennium AD (Rocher 1986: 156-160, 243-249).

The nucleus of the Yuga Story in the Vāyu and the Brahmāṇḍa Purāṇas is standard. The historical process is divided into eight periods: the four Yugas (comic ages) – Kṛta, Tretā, Dvāpara and Kali – and the four Sandhyās (transitional periods) – the Kṛta Sandhyā, the Tretā Sandhyā, the Dvāpara Sandhyā and the Kali Sandhyā – each placed between the respective Yugas. As in the other versions of the Yugas Story, the cycle of the Yugas is depicted as a progression from the Golden to the Iron Age and defined by the gradual corruption of the dharma (virtuousness). Aside from the standard characteristics however, the Yugas and Sandhyās of the Vāyu and Brahmāṇḍa Purāṇas include traits of purely historical nature. It is worthwhile to review some of these traits in a word-by-word translation[63].

During the first Kṛta Yuga, god creates people who are described as 'mobile gatherers'(VP 1.8.21). They

> …took refuge by the rivers, waterfalls, seas and mountains (VP 1.8.46)… These people ate food produced from the juice of the earth. Having acquired mental

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[63] All translations in this chapter are mine

> perfection, they moved wherever they wished (VP 1.8.47)... They took refuge by the mountains and oceans having neither houses nor shelters (VP 1.8.52)...

There is neither dharma (virtuousness) nor a-dharma (non-virtuousness) in the first Kṛta Yuga. People are socially undifferentiated. No system of varṇas and aśramas exists.

> In the beginning of the Kalpa, during the Kṛta Yuga there was neither dharma nor adharma. In the Kṛta Yuga (people) were born with their own and different duties and rights (VP 1.8.49)... In the Kṛta Yuga, the doing of good or evil did not take place. There was no system of varṇas and aśramas. Neither was there mixture of castes through unlawful intermarriage... there were no low class and high class people (VP 1.8.60-61).

During the Kṛta Sandhyā, the period of junction between the Kṛta and Tretā Yugas, two important changes occur: climatic deterioration and transition to sedentary life-style:

> When little time remained, because of the nature of the transitional period, extremes (of climate) began to take place. (People) were severely troubled by cold winds and burning sunshine. Tormented by these extremes they made shelters. Fighting with the extremes of climate they found recourse in houses. Before, they wandered wherever they wanted without having a base in houses. Now, depending on circumstances and their desire, they lived in houses, in deserts, in deep ravines, on the mountains and by the rivers... (VP 1.8.91-94).

The innovations of the Kṛta Sandhyā are developed in the Tretā Yuga. First, sacrifice is institutionalized:

> Yajña (sacrifice) was established by the gods, namely by Yāmas, Śuklas, and Japas with all their requisites (VP 1.57.61)... Then, Indra, the consumer of the world, together with all the gods established Yajña and all its requisites. When the aśvamedha (horse-sacrifice) was established, the Great Sages assembled and performed sacrifices with animals. After having heard about it, everyone assembled there (VP 1.57.91-92).

Secondly, agriculture is introduced. There are several stories found throughout the Purāṇas that expound on the transition to agriculture during the Tretā Yuga. According to one of them:

> … success befell them… As they wished, agriculture, the accomplishment of artha (welfare), became another means of their subsistence. Rainwaters, which poured downwards, became known as 'rivers'. Streams flowing in the ditches became known as 'streams'. Thus, in the second creation by rain, the rivers appeared. The little water that was left afterwards on the surface of the earth was mixed with dirt and became plants. Plants then produced flowers, roots and fruits. Fourteen types of not sown and non-cultivated trees and bushes that grew in the villages and forests gave birth to seasonal fruits and flowers. Such was the emergence of agricultural plants during the Tretā Yuga. Since then, in the Tretā Yuga people subsisted on these plants (VP 1.8.124-134; 1.2.7.124-130).

In another version of this story, the god Brahmā is held responsible for initiating agriculture:

> Then seeing the success of his actions, the self-existent lord Brahmā instituted agriculture for the sustenance of (people). Since that time plants were cultivated (VP 1.8.153).

In both versions, the introduction of agriculture is related to the emergence of the varṇāśrama system, dharma, daṇḍa (coercive power), pastoralism, craft production, and the study of the Vedas. The establishment of the varṇās – the first institutionalized system of social disparity in ancient South Asia – is presented as having particularly strong ties to the emergence of agriculture:

> When agriculture became fully perfected by (people), the Self-Existent (Brahmā) established rules in due order one by one. The ones who had power and means established themselves as Kṣatriyas for the protection of their deeds. … The ones who spoke "The truth is Brahmāṇ" and narrated the story of the past were Brāhmaṇs. The others who were weak were prescribed the duties of Vaiśyas… They were called Vaiśyas because they sustained their living by cultivation. Those who moaned, relented, and were engaged in serving others, those who were powerless and had little potency; he (Brahmā) called them Śūdras. When the system of the four varṇās was established everywhere, the lord Brahmā assigned specific karmas (duties) and dharmas (virtues). Yet again, out of ignorance people violated their dharmas. They did not live according to the dharmas of their respective varṇās and confronted each other. After having observed this in reality, the lord Brahmā assigned force, daṇḍa (coercive power, punishment) and war as the means of livelihood for the Kṣatriyas. To the Brāhmaṇs the lord assigned these three duties: sacrifice, study of the Vedas, and the receiving (of gifts). He gave cattle breeding, trade and agriculture to the Vaiśyas, and devised crafts as the means of sustenance for the Śūdras. There are also duties common for the Brāhmaṇs, Kṣatriyas, and Vaiśyas. These are sacrifice, study of the Vedas, and the giving of gifts (VP 1.8.153-164)… When the varṇās were set up, he established āśramas (VP 1.8.168)…

Among important innovations of the Tretā Yuga, mention must be made of the Śrauta ritual:

> In the beginning of the Tretā Yuga, Manu and the seven Sages spoke. The seven Sages spoke of the orally transmitted Śrauta dharmas, such as Agnihotra, the taking of a wife and the like; all prescribed by Brahmā in accordance with the Ṛgveda, Yajurveda, and Sāmaveda, ... (BaP 1.2.29.43-45).

Also, the Tretā Yuga witnesses the conceptualization of three means for achieving mokṣa (the final liberation): kāma (love), artha (wealth), and dharma (virtuousness):

> Artha, dharma, kāma, glory and victory are acquired by the kings one by one without any hostility (BaP 1.2.29.81).

In the sphere of sacred scriptures, the Tretā Yuga is characterized by the undivided four-partite (lit. four-footed) Veda and the compilation of the Mantras and Brāhmanas.

> In the beginning of Tretā, being the outcome of dharma, the Veda Samhita was an entity... (VP 1.57.47)...One four-partite Veda was known at the time of Tretā (VP 1.57.83)... The mantras and brāhmanas were compiled by the Sages (VP 1.57.60).

In the political sphere, the Tretā Yuga witnesses the emergence of kingship and daṇḍa (coercive power, punishment):

> Thenceforth arose the kings carrying the staff of daṇḍa. The rulers came to be called Rājas since they conciliated the people (VP 1.57.58).

An important institution of Cakravartins (the rulers, lit. the turners of the wheel) also emerges during the Tretā Yuga:

> The future, past and present Cakravartins are born during the Tretā Yuga (BaP 1.2.29.79).

Colonization of the earth takes place during the Tretā:

> Manu Svāyambhuva had ten grandsons who were similar to him. This whole earth with its seven dvīpas (continents) was settled by them during the first Tretā Yuga of the Svāyambhuva Manvantara (VP 1.33.4-5).

Finally, women's fertility is discussed in the context of the Tretā Yuga:

> Today women's menstruation continues until the end of their life. At that time that did not happen because of the nature of the (Tretā) Yuga. The menstruation of those women took place month by month. Sexual intercourse took place in accordance with menstruation (BaP 1.2.7.78-79).

The transitional period of the Tretā Sandhyā is not distinguished by any major transformations, save for generic statements about the deterioration of the dharma. The Dvāpara Yuga is the next to witness significant changes. Numerous vices overpower people during this age. "Greed, unhappiness, trade, war, indecisiveness in the issues of truth, breakdown of the varṇāśrama system, uncertainty of duties, restraint of sacrificial plants and animals, drunkenness, deceit, impatience, and violence" commonly characterize the people and manners that prevail during the Dvāpara Yuga (VP 1.58.3-4). Also, during the Dvāpara, difference of opinion starts among men; sacred scriptures split and multiply; philosophical schools and new branches of knowledge emerge; the twice-born begin to disregard the system of varṇāśrama; droughts, deaths and epidemics take place... The following excerpt from the Vāyu Purāṇa gives a succinct theological explanation to the perturbations that take place during the Dvāpara Yuga:

> Owing to the incompetence with regards to the causes and the uncertainty of the cause, there arises a confusion of opinions that results in the split of knowledge. A multitude of texts are created by individuals of different beliefs. The single Veda is made four-fold during the Tretā... The Vedas are further divided by the sons of the Sages who, confused by different opinions, misinterpret sounds and syllables and compose Mantras and Brāhmaṇas. Because of the minor and occasional (textual) modifications, the Samhitas of Ṛg, Yajur and Sāma are collated by the Sages who are proficient in the sacred knowledge of Śruti and hold different opinions. The teachings of Brāhmaṇas, Kalpasūtras and Mantras are compiled by the teachers, while other texts are opposed. During the Dvāpara, the twice-born live in a confused system of varṇas. Before, there was one Yajurveda. Now there are two. The entirety of Śāstras is perverted by generally confusing commentaries. Much confusion is brought by discussions on the Yajurveda. In a similar way, because of the unending uncertainties during the Dvāpara much confusion is made by the people of different views with regards to the Ṛg, Atharva and Sāma Vedas... Calamities, such as droughts, deaths, diseases, and uprisings, take place in the Dvāpara. Verbal and mental actions bring despair. Despair results in discussions on the liberation from suffering. These discussions lead to asceticism; asceticism leads to the realization of suffering, the realization of suffering leads to the birth of knowledge during the Dvāpara. The

> Śāstras of the Dvāpara confront the Śāstras honored earlier during the Svāyambhuva Manvantara. There are uncertainties in the Āyurveda (medicine), Jyotiṣa (astrology) and Vedāṅga (auxiliary Vedic sciences). Also there are uncertainties in the Arthaśāstra (political science) and Hetuśāstra (science of logic). The distinctions between Smṛti (the sacred knowledge) and the Śāstras (sciences) are established here and there (VP 1.58.9-24).

In addition to all these perturbations, the Śruti and Smṛti are divided during this Yuga (BaP 1.2.7.31.6) and the significant deterioration of the dharma takes place.

The worst degeneration of the dharma however takes place in the two final periods of the cycle, during the Dvāpara Sandhyā and the Kali Yuga. Descriptions of the Kali Yuga are found in most Purāṇas, the Mahābhārata and several other texts of Sanskrit literature. According to these descriptions, in the Kali Yuga the world is shaken by a multitude of social, religious and political perturbations. The deterioration of the dharma, fatal diseases, fear of hunger, danger of drought, loss of the authority of scriptures, neglect of the Vedas, cessation of sacrifices, the advent of rulers from the Śudras, Yavanas (Greeks) and Mlecchas (foreigners, barbarians), propaganda of heretic ideas, slaughter of children in the womb, mixture of castes,... these and other troubles lead to the end of the world and, ultimately, following the cycle, bring the return of the Golden Age of Kṛta. A vivid version of this story is told by the Sage Mārkaṇḍeya in his conversations with the Paṇḍavas in the Forest Book of the Mahābhārata. This story is well-known and has previously attracted the attention of scholars (Fleet 1911, Gable 1920, Pargiter 1913, Varma 1978-9). At the end of the Kali Yuga, during the transitional period of Kali Sandhyā, Kalki Viṣṇuyaśas, the tenth incarnation of the god Viṣṇu, comes to kill the Mlecchas and heretics and to turn the cycle back to the Golden Age of Kṛta

(VP 2.36.105-125; MBH 3.188.85-93, 189; as well as in many other Purāṇas). Thus ends the story of the Yugas in the Mahābhārata and the Purāṇas.

As I have mentioned above, there is a significant amount of philological literature dealing with the date, development and textual history of this story. For example, it has been argued that the historical component of the Yuga Story is a relatively late incursion (ca. 4th – 5th cent AD). At this point however, I am purposely avoiding the text-historical aspects of the Vāyu and Brahmāṇḍa Purāṇas. As I have argued in the first chapter, if we use texts as the sources for ideas rather than facts, meticulous text-historical methods no longer matter. When we refer to Marxism, we rarely recall when Engels, Lenin or Gramshi lived and what sociopolitical milieu was like at the time they wrote. In a similar way, whether the historical narrative of the Yuga Story emerged during the Mauryan, Kushana, or Gupta periods will not immediately affect our interpretations. Eventually, it would be helpful to know whose views this incursion represented and from which sociopolitical milieu it originated. At this point, it is sufficient to determine whether as a work of history, it can be used in the analysis of South Asian archaeology.

The first striking feature of the historical narrative of the Yuga Story is that it contains an elaborate model of cultural evolution. According to this model, the genesis of human society is cyclical, hierarchical and unilinear. It consists of six distinct stages (see table):

1. The Kṛta Yuga: egalitarian society of mobile gatherers from the creation of humans until the transition to sedentary life style;

2. The Kṛta Sandhyā: transition to sedentary life style caused by climatic deterioration;

3. The Tretā Yuga: a highly complex society characterized by a long list of social, economic and ideological traits;

4. The Dvāpara Yuga: a partial crisis and the decadence of dharma, when society still functions but evinces traits of decay and degeneration;

5. The Kali Yuga: a catastrophic collapse, disintegration of sociopolitical system, de-urbanization and ideological breakdown;

6. The Kali Sandhya: the total collapse of all societal and religious institutions eventually transforming into the new Kṛta Yuga.

Without a doubt, this model is both a work of history and a historical framework. Its mode of argument is organicist[64]. Its method of envisioning world history is structural and synthetic. Its generalizations aim at abstraction and discerning patterns and regularities. No individuals are of significance. Brahmā, the Seven Sages and Kalki are the personifications of inevitable destiny rather than meaningful historical agents. What matters are the laws and regularities manifested in the cycle of the Yugas, Manvantaras and Kalpas, not the peculiarities of historical process. It is the inevitability of fate or in the vivid words of the Pauranikas 'the power of the essence of the future', which makes the Age of Kṛta return after the perturbations of the Age of Kali (VP 1.58.102).

Most importantly, this model displays an advanced level of social thinking grounded in empirical knowledge. Consider the story of transition to agriculture. Both in

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[64] See my reference to Hayden White's *Metahistory* in the first chapter.

Table 11: Sociocultural Traits of the Yugas and Yuga Sandhyās

Yugas	Main Traits
Kṛta Yuga	* Creation of people * Mobile gatherers * No dharma, no varṇāśrama system
Kṛta Sandhya	* Climatic deterioration * Sedentary life style
Tretā Yuga	* Agriculture, cattle-breeding, crafts * Life in helmets, villages and cities * The rule of the dharma * The proper functioning of the varṇāśrama system * The institutionalization of the Yajña (sacrifices) and the Śrauta Ritual yet the placement of a taboo on the killing of animals * The kāma, artha and dharma as means for achieving mokṣa * The authority and unity of sacred scriptures: the single four-fold Veda and some Brāhmaṇas * The reign of kings: the Cakravartins and the Rajas * Kings carrying the staff of daṇḍa (coercive power, army) * Colonization of the earth * Women fertility
Tretā Sandhyā	* No specific traits, except for the deterioration of the dharma
Dvāpara Yuga	* Deterioration of the dharma * The formation of the Vedic cannon, i.e. classification and division of the Vedas by the Vedvyāsas and the compilation of the Samhitās * Confusion of the Vedas by people of different views * Emergence of a large variety of texts commenting on the Vedas * The division of the Yajurveda into Śukla and Krişṇa recensions * Formations of schools of thought and sciences, emergence of śāstras * People begin to disregard the varṇāśrama system * Draughts, premature deaths and epidemics
Dvāpara Sandhyā	* No specific traits, except for the deterioration of the dharma
Kali Yuga	* Deterioration of the dharma * Fatal diseases, hunger, droughts * Loss of the authority of scriptures * Neglect of the Vedas * Cessation of sacrifices * The advent of rulers from the śūdras, yavanas (Greeks) and mlecchas (foreigners) * Warfare * Women outnumber men * Mixture of the varṇāśrama system * Propaganda of heretic ideas * Slaughter of children in the womb
Kali Sandhyā	* The dharma completely destroyed * Very few people left on the earth after draughts and slaughter * Complete collapse of the varṇāśrama system * The twice born flee to the forests * Kalki, an incarnation of Viṣṇu, comes to kill the mlecchas and infidels

the Vāyu and Brahmāṇḍa Purāṇas, climatic deterioration is seen as the prime cause of sedentary life and the domestication of plants. The understanding of the relationship between sedentism and agriculture is also quite realistic. Sedentism precedes agriculture and is classified in a separate sub-phase, namely the Kṛta Sandhyā. The consequences of the introduction of agriculture are very similar to those advocated by contemporary anthropologists. Sacrifices, violence, social differentiation, the formation of an elaborate ideology, diversification of kingship, development of religion, and even women's fertility, in one way or another, are mentioned in the Vāyu and Brahmāṇḍa Purāṇas. The concepts of the Dvāpara and Kali present yet another example of highly developed social thinking. In them, the Paurāṇikas conceptualize the sociopolitical crises that result in the collapse of complex societies. Most premises of these crises – the intensification of religious debates, warfare, corruption of the varṇāśrama system, propaganda of heretic ideas, slaughter of children in the womb, the advent of foreign rulers, and the like – are all based on the observation and rethinking of real historical events that took place in the second half of the first millennium BC. Moreover, there are indications that the historical concepts of the Yuga Story may have had practical and theoretical implications already at the time of its formation and codification.

The Aśokan inscriptions, for example, mention the term kapa/kalpa, which is frequently associated with the word 'yuga'. The Girnar version of the Rock Edict 4 uses the term savata-kapa / samvarta-kalpam when speaking of the promotion of the right dharma by the sons, grandsons and grand-grandsons of Aśoka. The Kalsi version of the

Rock Edict 5 uses the term ava kapam / yavat kalpam. Savata kappa / samvarta kalpa literary means 'the era of destruction,' and ava kapam / yavat kalpam means 'throughout the era" (Hultzsch 1925). In spite of the existence of the different interpretations of these terms (Barua & Chaudhuri 1990: 77, Nikam & McKeon 1958: 31, Amulyachandra Sen 1956: 74-75), it is quite likely that the term kapa / kalpam refers to the idea of cyclical time, and if so it is quite remarkable that it marks actual time periods in historical documents of the Mauryan Period. Another, more direct indication of the use of the Yuga terminology is found in the Kauṭilīya Arthaśāstra, which unequivocally includes the term Yuga in the list of measures to be learned by the supervisors of measurements (KA 2.20.28-29).

Yet, the most remarkable use of the Yuga terminology is found in the sections of the Purāṇas which describe the continents and people of the earth.[65] The full sequence of the Yugas is not ascribed in these sections to every single continent. The ages of the Kṛta, Tretā, Dvāpara and Kali are known primarily in the Bhāratavarṣa, that is India (VP 1.57.22; 1.24.1).[66] In other mythical continents and subcontinents, the full sequence is often unknown. The continent of Puṣkara, for example, is characterized as being at the stage of the Kṛta (VP 1.49.115-117). The continents of Plakṣa and Śāka are described as being permanently in the time of the Tretā (MP122.40; VP 1.49). In some continents, no Yugas are known at all (VP 1.33.49). In other words, some regions of the world never leave the stage of the Kṛta, some remain at the stage of the Tretā, some go through the

[65] These sections are called bhuvavinyasa and are present in most of the eighteen canonical Mahāpurāṇas.

[66] Bhāratavarṣa is a traditional name for India.

full cycle of the four Yugas and some never enter the evolutionary cycle at all. Thus, the Pauranikas use the historical model of the Yuga Story as a conceptual device to differentiate the stages of cultural evolution; and similar to the thinkers of the French Enlightenment, they distinguish between the 'civilized' and 'uncivilized'. The Bhāratavarṣa, or India, of course is 'civilized' as it has gone through the full cycle of the Yugas, and by the time of the composition of the Epics and Purāṇas has entered the final period of the Kali.

Thus we have approached the main issue of our enquiry, the concept of civilization. Although it has not been my intention to find a direct equivalent to this concept – the historical constructs of the Yuga Story are self-sustaining[67] – some of the ideas that the Yuga Story conveys are, in my opinion, highly reminiscent of the views of civilization used in ancient history and archaeology. The perusal of these ideas, without doubt, can contribute to our own models of ancient Indian Civilization.

The highest level of sociocultural complexity in the sequence of the Yugas is attained with the transition from the Kṛta to the Tretā Yuga. Following the transitional period of the Kṛta Sandhyā, the Tretā Yuga witnesses the largest number of drastic cultural innovations, which can be summarized in eleven traits (based on the exact wording of the passages translated above):

1. Agriculture, cattle-breeding, crafts;
2. Life in hamlets, villages and cities;

[67] Parallels with other ancient concepts of time and social change – the myth of five ages by Hesiod, etc. – are quite obvious yet their exploration is far beyond the goal of my current enquiry.

3. The rule of dharma;
4. The proper functioning of the varṇāśrama system;
5. The practice of the Yajña and the Śrauta ritual, with a taboo on the killing of animals;
6. The kāma, dharma and artha, as the means for achieving mokṣa (final liberation);
7. The authority and unity of sacred scriptures: the single four-fold Veda and the principle Brāhmaṇas;
8. The reign of kings: the Cakravartins and the Rajas;
9. Kings carrying the staff of daṇḍa (coercive power, army);
10. Colonization of the earth;
11. Changes in women's menstrual cycles.

Moving a step forward from the succinct wording of the Purāṇas, one can render each of these innovations into the language of contemporary social science. The traits of the Tretā Yuga then become noticeably more theoretical and can be presented as follows:

1. The formation of the diversified and specialized economy divided into three main branches: agriculture, pastoralism and craft-production;
2. The solidification of a sedentary life-style by creation of permanent villages and the emergence of cities;
3. The emergence of an orally transmitted behavioral code, dealing with a large variety of legal, social and ethical issues (dharma);

4. The formation of the unique sociocultural system based on a mix of hierarchical and heterarchical relations (the system of the four varṇas and four aśramas);
5. The emergence and institutionalization of sacrifices and rituals, yet the placing of a taboo on the killing of animals;
6. The standardization of the means for achieving the ultimate liberation (implies the existence of religious system/s aimed at liberation);
7. The establishing of the unequivocal authority and unity of the orally transmitted sacred scriptures, the Vedas;
8. The institutionalization of kingship;
9. The institutionalization of the means of coercion for the maintaining of social order (daṇḍa): army, supervisors and institutionalized punishment (the state?);
10. The beginning of colonial expansion;
11. Increase in women's fertility.

Without question, either of these two lists represents very a sophisticated concept. Like the idea of civilization in archaeology, the Tretā Yuga marks a drastic qualitative shift to the most complex period in human history. The Pauranikas seem to be purposely emphasizing the magnitude of this shift: no other Yuga or Sandhyā is defined by such a diverse and long list of changes. The traits that define these changes are of two types: generic and idiosyncratic. The sedentary life-style in villages and cities, the institution of kingship, the means of coercion (the state), colonialism, the increase in women's fertility, and agricultural economy are the generic traits; not uniquely South Asian, they could equally characterize many other parts of the ancient world. The dharma, varṇāśrama,

yajña, śrauta, and all the other remaining traits are idiosyncratic: one does not find them in Greece or Mesopotamia. Yet taken together, all of these traits are closely interrelated. Sacrifices, agriculture, the system of varṇas and āśramas, dharma, kingship, daṇḍa, etc, are conceptualized interdependently; their emergence is interrelated and is contingent on one another.[68] The societal organization of the Tretā Yuga thus is perceived as an organic whole, as an entity consisting of codependent elements.

Remarkably, five of these elements, namely the Dharma, Veda, Yajña, Varṇāśrama, and Vārttā, continue to play the key role in the descriptions of the subsequent periods; the complex sociopolitical organization does not perish at the end of the Tretā Yuga, and the state of affairs during the Dvāpara and Kali Yugas is defined by the degree of degeneration of the Dharma, Veda, Yajña and Varṇāśrama. Thus, if there is a deep structure beyond the definitions of the Yugas and Sandhyās that stand for the most complex periods of the cycle, this structure rests on five pillars:

1. Ethical and legal norms (dharma);
2. Orally transmitted sacred knowledge (Veda);
3. Sacrifice (yajña);
4. Social organization (varṇāśrama); and

[68] For example, when Sūta explains to Śāmśapāyana how sacrifice was established, he starts with agriculture, sedentism and the varṇāśrama: "When the plants grew and rains poured, when the agriculture, houses, aśramas (hermitages) and cities were established, Indra, the consumer of the world, for the deeds (karma) of this and other worlds, first created the varṇāśrama system and collated the mantras into the samhitas. Then, joined by all the gods, he established yajña (sacrifice) and all its requisites" (VP 1.57.89-90).

5. Agricultural economy (vārttā).

Who of the modern social thinkers would have come up with a better structural definition of the ancient Indian Civilization? Are not these five traits reminiscent of the deep structures of the Braudelian *longue duree*? The least that these traits stand for is the quintessential definition of the Indian Civilization from the point of view of the historical agents, i.e., the Pauranikas who compiled the extant versions of the Vāyu and Brahmāṇḍa Purāṇas.

The historical narrative of the Yuga Story thus contains two models reminiscent of the idea of civilization. The first one, diachronic, is expressed in the concept of the Tretā Yuga and is meant to designate a drastic cultural shift from the egalitarianism and hunting-gathering to the sociocultural complexity and food-producing economy. The second one, synchronic, is expressed in the five aforementioned traits that emerge during the Tretā Yuga and maintain importance until the end of the cycle. The latter model is meant to emphasize the quintessential sociocultural core or the Braudelian deep structure that prevails from the Tretā to Kali Yuga. Both of these models are predominantly idiosyncratic (focused on the Indian rather than generic view of civilization) and are unequivocally subjective (reflect the perceptions of a group of people, whom I have called the historical agents). With regard to subjectivity, one must add that these models are the products of Brahmanic ideology, and unlike the definition of the city extracted from the ideologically diverse texts in the second chapter, omit the views of other contemporary social and religious groups.

The question then arises whether being so ideologically biased these models have any value for the analysis of archaeological data. In my view, the answer to this question

Table 12: Two Definitions of the Indian Civilization by Historical Agents

The Indian Civilization, Model 1: Defined diachronically from the point of view of the transition to the Tretā Yuga	The Indian Civilization, Model 2: Defined synchronically as the deep structure of the Tretā, Dvāpara and Kali Yugas
1. The formation of diversified and specialized economy with the foundation in agriculture, cattle-breeding, and crafts; 2. The solidification of sedentary life-style in rural and urban centers; 3. The emergence of rigid legal and ethical code of dharma; 4. The formation of the idiosyncratic sociocultural system of varṇas and āśramas based on a mix of hierarchical and heterarchical relations 5. The institutionalization of the sacrifices (yajña) and the Śrauta Ritual the imposition of a taboo on the killing of animals 6. The formulation of the kāma, artha and dharma as the main three means for achieving mokṣa (ultimate liberation) 7. The establishing of the authority and unity of the sacred scriptures, such as the single four-fold Veda and the main Brāhmaṇas 8. The institutionalization of kingship through the rule of Cakravartins and Rajas 9. The maintaining of social order by means of the institution of coercive power (the daṇḍa) 10. The beginning of territorial expansionism 11. Changes in women's productive behavior	1. The orally-transmitted code of legal, ethical and social behavior (dharma) 2. The orally transmitted sacred knowledge (the Vedas) 3. Sacrifices (yajña) 4. The idiosyncratic sociocultural organization (varṇāśrama) 5. Agricultural economy (vārttā)

lies in the choice of a proper theoretical angle. On some levels, the Pauranikas adhere to rigid religious and ideological dogmas; for example, they ascribe unreasonably early relative dates to the typically Brahmanic traits such as the Vedas, Varṇāśrama, and Śrauta ritual. On other levels, they rely on sophisticated empirical knowledge and critical

thought; the story of the transition to agriculture and the concept of sociopolitical crisis are both empirically grounded and theoretically sophisticated. The two theoretical constructs discussed above exist on several levels. While, on the surface some of their traits reflect the dogmas of faith, in subtext they display the patterns of highly sophisticated critical thinking. As an analogy to this kind of historical analysis, one can refer to the works of the Soviet Marxists. Paying the tribute to the required dogmas – the class struggle, forces of production, etc. – the Marxist historians often managed to convey original and even anti-Marxist ideas. The Pauranikas responsible for the compilation of the Vāyu and Brahmāṇḍa Purāṇas must have been in a somewhat similar situation. Using the required terminology and framework – the Veda, Yajña, Śrauta, etc. – they conveyed their critical thoughts and empirical knowledge by means of subtext. Whether they did it wittingly or unwittingly is a question for a separate study. What matters is that their final theoretical models present a great mix of ideas, many of which are the products of critical thinking about the past. As far as the two discussed models are concerned, both of them are the products of such thinking and, in my view, contain ideas that are interesting from the point of view of archaeology.

The most striking feature of the first model is that *it is based on a highly sophisticated theory of transition to agriculture, yet reveals no traces of the concept of the Urban Revolution.* In fact, the emergence of cities is not even distinguished in the Yuga Story in a separate stage of a phase. Briefly mentioned among other innovations of the Tretā Yuga, cities play a very insignificant role in the Yuga Story. The three stages that stand for a complex society are the Tretā, Dvāpara, and Kali. The Tretā begins with the transition to agriculture, the Dvāpara marks a partial systemic crisis, and the Kali is

the collapse of a complex society. The history of civilization thus is conceptualized in three phases: the emergence/efflorescence, the decadence, and the collapse. Cities play no important role in either of these phases. Neither their emergence nor disintegration is presented as a major event comparable in significance to the transition to sedentism, the introduction of agriculture, the formation of the varṇāśrama system or the deterioration of the dharma. Conceptually, this means that unlike many contemporary archaeologists who, treading in Childe's footsteps, distinguish between the Agricultural and Urban Revolutions, the Pauranikas envisioned the transition to agriculture and the emergence of cities under the single analytical unit, i.e., the concept of the Tretā Yuga.

Consequently, the most striking feature of the second model is that *the formation of the ethos of Indian Civilization is temporally and causally linked to the transition from hunting-gathering to agriculture and is contingent on transformations in ethical, religious, ritual, social and agricultural spheres*. Meanwhile, *cities, writing and monumental architecture, i.e., the three traits that for a long time have been seen as the definitive markers of civilization, are deeply epiphenomenal to the ethos of ancient India.*

Conclusion: A Model of the Ancient Indian Civilization

In the first chapter, I proposed a method, aimed at a structural, humanistic, subjectivist and reflective study of the past ('subjective humanism'). Given that this method has been of utmost importance for this study – it led me through the analysis of ancient texts and archaeological data – I should briefly reiterate its four main assumptions. According to the first assumption, human agency constitutes the key driving force beyond history. Consequently, the objects of anthropology and history are the

products of human will, intellect and action. According to the second assumption, the creation of structures and models is essential for the conceptualization of human past, particularly if this past is known from fragmentary material remains. According to the third assumption, there can be no purely scientific and objective interpretation of the past; regardless of whether the correct interpretations exist, the desire to acquire them is what really matters. According to the fourth assumption, the ideas and thoughts of historical agents present an intrinsic part of the events, phenomena, processes, structures and models of the past. By incorporating these ideas and thoughts in our interpretations we make the study of the past more intimate and insightful. The first three of these assumptions are not new. I have borrowed them in bits and pieces from the writings of several social thinkers, who adhere to humanistic, subjectivist and literary values. The fourth assumption, I believe, is rather novel for it brings the sociopolitical ideas of historical agents to the attention of archaeologists and proposes to treat the ancient texts as sources for ideas rather than facts. Combined in a single scholarly method, these assumptions have paved a path for this study of the ancient South Asian city, i.e., the city of the Harappan Civilization and the city of the Ganges Civilization. Following these assumptions, I brought together two kinds of very diverse data: the thoughts of historical agents about the city and civilization extracted from a number of different Sanskrit and Pali texts, and the archaeological facts about fortifications and authority from the twelve sites of the Harappan Civilization and the thirteen sites of the Ganges Civilization. Now it is time to surmise, first whether together these data create a new picture of the ancient Indian city, and second whether the Harappan and Ganges Civilizations are the expressions of a larger analytical unit that can be called the ancient Indian Civilization.

In the second chapter, I presented the views of historical agents representing a large variety of social and religious groups that lived in Northern India roughly between the mid-first millennium BC and the mid-first millennium AD. It has turned out that, either wittingly or unwittingly yet deeply in their minds, these very different people shared the same quintessential view of the city. According to this view, the city as an idea and an historical phenomenon was distinguished by two traits: fortifications and authority. Since I have argued that as a complex sociopolitical and cultural phenomenon the city cannot have a single and universally comprehensive definition – instead it can be conceptualized from different perspectives, among which the perspective of historical agents is particularly important – I have taken this view as a working hypothesis to be tested against the archaeological data of the Ganges Civilization.

Consequently, in the third chapter, I analyzed the archaeological data on authority and fortifications from the thirteen sites of the Ganges Civilization. In the processes of this analysis, I discovered that the massive fortifications that surrounded most of these sites carried symbolic rather than utilitarian functions and served as the main material symbol of authority; no palaces, temples, rich burials or objects of luxury seemed to have been necessary for the expression, solidification and glorification of power. Given this, I argued that the construction of fortifications in the Ganges Civilization symbolized three codependent processes: the formation of territorially bound identities, the shaping of authority and the emergence of cities. This in turn has shown that the formula extracted from the texts presents a plausible model for the conceptualization of the processes that took place in the Gangetic Doab and led to the emergence of cities in the mid-first

millennium BC. Indeed, the earliest Gangetic cities were epitomized by the emergence of authority and the construction of fortifications.

In the fourth chapter, I moved back in time and tested the same model against the archaeological record of the Harappan Civilization. I analyzed the data on authority and fortifications from twelve Harappan sites and arrived at somewhat similar conclusions. The most explicit and opulent expressions of authority in the Harappan Civilization are massive fortification systems (platforms and walls), which appear to have carried primarily symbolic functions. Through variances in scale, the management of access, the implementation of segregation, and the accentuation of certain spaces, these fortification systems create three-dimensional segregated worlds, characterized by restricted access and hidden monumentality. The essence of these worlds was ideational; I have proposed that they were products of a unique and complex worldview focused on the structure of the universe. By creating the miniature replicas of the universe, the Harappan fortification complexes marked territorially bound identities and, along with authority, epitomized the emergence of the first cities.

Thus the answer to the first question is apparent. The concepts extracted from the texts have helped me to discern several striking similarities between the mechanisms of urbanization in the Harappan and Ganges Civilizations and to formulate a new model of the earliest South Asian city. According to this model, the emergence of cities in the Harappan and Ganges Civilizations can be distinguished by the formation of authority expressed in the construction of massive fortifications. Authority, although manifested in some other archaeological traits, expressed itself in the construction of fortifications most conspicuously and lavishly. Fortifications, besides representing the power of authority,

carried a number of symbolic functions: delineated space, indicated the formation of territorially bound identities, and possibly created mesocosms, i.e., the miniature replicas of the universe.

The answer to the second question is more complicated. Whether the Harappan and Ganges Civilizations are the expressions of the same cultural phenomenon has been debated in literature for a long time. While some scholars emphasize the 'Indianness' of the Harappan Civilization (S. P. Gupta 1996, B. B. Lal 1997, 1998, 2002b, c, Simha 1995), others still perceive it in relative isolation (Bridget Allchin & Allchin 1982, Possehl 2002c, Tosi 1993, Witzel 1999a, b, 2000, 2001). Much of course depends on the use of the term civilization. As I have proposed above, civilization is a deep structure, which maintains importance over a long period of time. Illusory and to a large degree imaginary, this structure connects the historical reality, the mind of the researcher and the mentality of historical agents. To define a civilization is to provide a glimpse of this structure from each of these three perspectives. My analysis of archaeological and textual data has set the grounds for doing so.

On one hand, my analysis has revealed similarities in the processes of urbanization in the Harappan and Ganges Civilizations. The scale and importance of these similarities are sufficient to discard equafinality – the attainment of similar results from different preconditions – and to indicate the existence of similarities in deeper sociocultural structures. In other words, that evidence for authority in both civilizations comes mostly from fortifications, that fortifications carry symbolic functions, and that cities are epitomized by authority and fortifications are no coincidence; these are the products of the same deep sociocultural structures. Moreover, since the disclosed

similarities characterize the formative rather than the mature periods of urbanization, the deep structures must be also characteristic of the formative or even pre-formative periods. What this means is that *if the processes of urbanization in the Harappan and Ganges Civilizations were indeed rooted in similar structures, these structures had been formed and maintained prior to the emergence of the Harappan and Gangetic cities.*

On the other hand, my analysis of the two Sanskrit Purāṇas has disclosed two theoretical models, which conceptualize a transition to and the maintenance of a complex sociocultural organization through a set of idiosyncratic and generic traits. Remarkably, this set of traits includes agricultural economy; sedentary life-style; the orally transmitted code of legal, ethical and social behavior; the orally transmitted sacred knowledge; sacrifices; the idiosyncratic social organization; rituals; the institution of kingship; coercive power and a few other traits; yet it excludes writing, cities and monumental architecture, the three traits that feature prominently in the archaeological definitions of civilization.[69] In other words, neither emergence nor maintenance of a complex society, in the view of our historical agents, require cities, writing or monumental architecture, yet they require orally transmitted sacred and legal codes, sacrifices, and the idiosynratic social system of varnas and asramas.

It is needless to explain that these two perspectives – archaeological and textual – reveal apparent conjunctures. It is due to these conjunctures that a new model of the ancient Indian Civilization can now be formulated. Combining three perspectives – archaeological, that of historical agents and my own – this model is aimed to provide an

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[69] Cities are mentioned, yet not seen as a precondition or an important trait of the Tretā Yuga.

alternative hypothetical explanation for the genesis of civilization in northern South Asia and, in conclusion to this study, can be summarized as follows.

The sociocultural ethos of ancient India is formed prior to the formation of the Harappan Civilization. Like the Tretā Yuga, which begins with the transition to agriculture, the ethos of the ancient Indian Civilization is shaped during the Neolithic and Chalcolithic Periods. Rooted in the rural life style, it can be defined by four traits found in the historical narratives of the Sanskrit Puranas and representing the perspective of historical agents. Modified in the language of contemporary social science, these four traits can be presented as follows:

1. Agricultural economy and predominantly rural life-style;
2. A set of orally transmitted sacred and legal codes;
3. An idiosyncratic semi-hierarchical, semi-heterarchical social system based on a set of beliefs and ideological norms rather than on access to the means of production;
4. And a set of ritual and sacrificial practices.

Aside from agricultural economy, none of these traits requires an explicit material expression. As a result, it is either very difficult or simply impossible to verify their existence with the help of archaeological data. Yet taken together, they are significant enough to be maintained for thousands of years in different linguistic, religious, ethnic and political contexts. Let me amplify some of their meanings and contexts.

Agricultural economy and rural life style may appear as a very generic and even trivial trait. What needs to be emphasized is that this trait distinguishes the most complex sociocultural organization of the entire Yuga cycle. In other words, it is the villages not

the cities that are responsible for shaping the ethos of ancient Indian Civilization. Fairservis once noted that one of the most peculiar features of the Harappan culture was that it possessed civilization but its people dwelled largely in villages. Consequently, "to know more about the Harappan culture" – he continued – "we must know more about Indian village life" (Fairservis 1961: 33). Without doubt, if the ethos of the ancient Indian Civilization had been defined as not contingent upon cities, Fairservis would not have found this feature peculiar. *Cities, in other words, despite all their inherent significance and innovations, were epiphenomenal to the ethos of ancient Indian Civilization. Their initial emergence in the middle of the third millennium BC, gradual disintegration in the first half of the second millennium BC, and the re-emergence in the mid-first millennium BC did not destroy the ethos of ancient India. This ethos was deeply rooted in rural life style and, save for a few important morphological traits, cities were similar to the villages.*

The next two traits – orally transmitted codes and the idiosyncratic social system – are coterminous with the concept of the Indian Style proposed by Malik. Remarkably, Malik made observations similar to those of the historical agents. Orality provides good explanations for at least three aspects of South Asian protohistory: the brevity of the Harappan inscriptions; the transmission of information in the context of a complex sociopolitical organization without writing (the pre-Harappan and the Vedic cultures); and the lack of conspicuous material expressions of religious and ritual practices (the words were apparently more important than temples or ritual paraphernalia). Fully accepting the importance of orality, I would nonetheless go a step further by following the premise of historical agents and suggesting that the formation of some orally

transmitted behavioral, social, legal and sacred codes may have begun quite early. This of course does not mean that the Vedas or Dharmasastra were composed, as many in modern India wish to believe, during the Harappan or even Pre-Harappan periods. This may however mean that the mechanisms of memorization and transmission as well as the first codes of complex information were formed prior to the emergence of the Harappan Civilization. The Harappan cities may have then marked the critical point in the accumulation of this orally-transmitted information, or in other words the transformation of quantity into quality. The best example of this transformation is the founding of Mohenjo-Daro. If Michael Jansen is right in asserting that Mohenjo-Daro was a founder's city, the people that built it must have acquired an elaborate sociocultural organization and learned complex orally transmitted codes of technical and ideological information prior to its construction. *The emergence of cities, from this point of view, was an outburst of information accumulated and transmitted orally over a long period of time.*

With regard to the social system, the historical agents emphasize the importance of the 'varṇāśrama', which emerges, in their view, soon after the introduction of agriculture. Malik argues that caste exists during the Harappan Period. As far as the use of terms is concerned, in my view, both caste and varṇāśrama are better avoided. Judging from recent publications, the term caste has become so politicized and controversial that just to define it requires today a separate study. The term 'varṇāśrama' is not a much better option. Since it implies the existence of four specific social groups (brāhmaṇs,

kṣatriyas, vaiśyas and śūdras)[70] and four specific stages in the life of a brāhmaṇ (brahmacarya, gārhasthya, vānaprastha and sanyāsa)[71], it is not sufficiently generic. The subtext or the theoretical premise of using the terms 'caste' or varṇāśrama nevertheless deserves attention. Without doubt, the disclosed similarities between the Harappan and Ganges urbanizations – in particular, the role that fortifications played in the solidification of authority and in the formation of territorially bound identities – are indicative of the similar social structures. In this respect, I agree with Malik (1968), Lamberg-Karlovsky (1999) and others who have advocated continuity in social organization, yet the degree and type of this continuity are still to be established. Since it has been beyond the purpose of this study to undertake a thorough comparative analysis of the Harappan and Gangetic social systems, all that the data and ideas assembled above can indicate is that during the initial stages of urbanization, the social systems of the Harappan and Ganges civilizations shared a similar set of quintessential traits which instigated similar processes of the emergence of authority and the formation of local identities. To pinpoint the existence of such a set of traits, I have modified the 'varṇāśrama' system of the historical agents into the idiosyncratic, semi-hierarchical and semi-heterarchical social system which is based on as set of beliefs and norms rather than on the access to the means of production. I have called this system idiosyncratic because it is uniquely South Asian; both Harappan and Ganges Civilizations share a set of

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[70] Priests, warriors, peasants and outcasts.

[71] The stage of a student, the stage of a householder, the stage of a hermit, and the stage of a wandering beggar.

quintessential traits, and at least some of these traits are formed prior to the emergence of the Harappan Civilization. I have called this system 'semi-hierarchical' and 'semi-heterarchical' because the only unequivocal proof of a full-time authority and massive consumption of labor comes from the fortifications which performed symbolic functions: no palaces, temples, rich burials, or objects of luxury were necessary to solidify this authority. This of course does not mean that social hierarchy could not be conveyed by other means, i.e. ritual, ideology, physical coercion, etc. This does however indicate that heterarchical relations played a significant role in this system, and most importantly, that the foundation of this system was ideational rather than economic.

The final fourth trait indicates the existence of a set of sacrificial and ritual practices that begin to form possibly prior to the emergence of the Harappan Civilization and continue to be shaped and modified throughout the third, second and first millennia BC. There is no need to reiterate the argument of those scholars who believe that the archaeology of the Harappan Civilization provides evidence for the existence of religious practices reminiscent and possibly prototypical of those, exercised in the Vedic and Mauryan India. A variety of shared iconographic motifs, the linga and yoni stones, fire altars and the importance of water have been cited as symbols of religious continuities between the Harappan Civilization and early historical India since the time of John Marshall. Anyone working on the Harappan material today would probably agree that at least some of the traits characteristic of early historical India are indeed present in the Harappan archaeology. The most conspicuous among these traits are the use of water in Mohenjo-Daro and Dholavira – the water splendor or 'Wasserluxus' as Michael Jansen termed this phenomenon – and certain iconographic motifs possibly indicative of the

worship of nagas (snakes), trees, animals and some proto-Saivite deity. It is nevertheless important to realize that the presence of the same objects of worship, iconographic motifs and non-utilitarian artifacts in the archaeological record of two temporally distinct cultures does not necessarily mean that the people who created these cultures believed in the same gods, spoke the same language, or belonged to the same ethnic groups. On the contrary, as numerous ethnographic and historical examples show, the same buildings, motifs and objects can stand for very different religious and ideological values; the Aya Sofia of Istanbul is a symbol of both Christian and Moslem faith, the images of the Buddha at Gaya are worshiped by the Vaisanavites who believe that the Buddha was the ninth avatara of the God Vishnu, and water plays an important role in at least several Indian religions. What this means is that if the Harappans, the Vedic Aryans and succeeding ethnic or religious groups indeed shared certain ritual and sacrificial practices, the meaning and ideational background of these practices could be very different. In summary, I believe the two models of the Indian Civilization extracted above from the Sanskrit Purāṇas include yajña for good reasons: certain ritual norms are likely to have been developing since the Neolithic or Chalcolithic Periods. The Wasserluxus and prototypal iconography could be the expressions of this development, yet the ideology, ethnicity, religion and language of the people who practices these norms could be very different.

To conclude, I would like to reiterate that epistemologically the proposed model stands for three perspectives: the sociopolitical thought of historical agents, historical reality, and my theorizing. Even if a few conjunctures between these three perspectives have been found, then the goal of this study has been achieved. One of the byproducts of

this study is the re-evaluation of ancient Indian sociopolitical thought. The people responsible for the composition of the Epics, Sūtras and Purāṇas were apparently well aware of the historical past, yet for some reasons did not record it in the form of chronicles. The memory of the past and thinking about the past was absorbed in theoretical models hidden within their theology and myths. As the Vāyu Purāṇa portrays the transition from civilization to sociopolitical collapse and back to civilization, the memory of the past is said to be preserved and maintained by a few survivors.

> Miserable and struck by droughts they abandoned agriculture. They left their countries (janapadas) and lived in the borderlands. They found shelter by the rivers, seas, wells and mountains. Very miserable, they subsisted on honey, meat, roots, and fruit. They wore garments of bark and tiger skin. They had neither wives nor sons. Having fallen off the system of varṇaṣ and āśramas, they started a horrific mixture of castes. These people reached the abyss. There were very few of them remaining. They were old, ill and hungry. From grief they turned to infidelity… Infidelity led to contemplation, contemplation to serenity. In the state of serenity they awoke. Having awaken they turned to dharma. When these survivors from the Kali obtained this knowledge, the Yuga changed after one day and night… When the Kṛta Yuga started again, the survivors of the Kali became the subjects of the Kṛta Yuga (VP1.58.96-101, 103).

It is tempting to hypothesize that this story stems from a real historical experience. The genesis of civilization in South Asia from the middle of the third to the middle of the first millennium BC perfectly matches this pattern. It is not impossible that the memory of the Harappan civilization passed through generations to the residents of the Gangetic states and the Mauryan Empire. Yet this is a topic for another study.

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